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Department of Infrastructure, Transport,
Regional Development and Communications

Reforms for the Disability Standards for Accessible Public Transport 2002

Decision Regulation Impact Statement

February 2022



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Abbreviations

Table 1: Abbreviations

Abbreviation	Description
ACT	Australian Capital Territory
AHRC	Australian Human Rights Commission
DDA	<i>Disability Discrimination Act 1992</i>
Education Standards	Disability Standards for Education 2005
NSW	New South Wales
NT	Northern Territory
Premises Standards	Disability (Access to Premises – Buildings) Standards 2010
QLD	Queensland
RIS	Regulation Impact Statement
SA	South Australia
TAS	Tasmania
The Whole Journey Guide	The Whole Journey Guide: A guide for thinking beyond compliance to create accessible public transport journeys
Transport Standards	Disability Standards for Accessible Public Transport 2002
Transport Standards Guidelines	Disability Standards for Accessible Public Transport Guidelines 2004 (No.3)
VIC	Victoria
WA	Western Australia

Executive Summary

There are approximately 4.4 million people with disability in Australia, or around 1 out of every 5 Australians.¹ Access to public transport is critical for people with disability to participate fully in community life and the economy. Many use public transport to take them to work or study, connect them to family, friends and the community, or help them access services, such as healthcare.

The *Disability Discrimination Act 1992 (DDA)* recognises the central role of public transport in everyday life. The DDA makes discrimination on the basis of disability unlawful in the provision of public transport services, as it does in other key areas of public life, such as employment and education.

The Disability Standards for Accessible Public Transport 2002 (**Transport Standards**) were introduced under the DDA to provide certainty to providers and operators of public transport services and related infrastructure about their legislative responsibilities. Public transport services covered include trains, trams (including light rail), buses, ferries, aircraft and taxis.

The Transport Standards require all of Australia's public transport networks and associated infrastructure to be fully accessible by the end of 2022 (with the exception of trains and trams, which have until the end of 2032).

The effectiveness and efficiency of the Transport Standards are reviewed every five years. A key recommendation in the second review was that the Australian Government, jointly with state and territory governments, should 'modernise' the Transport Standards. The review recognised that, after more than a decade since their adoption, the Transport Standards may not be meeting the current and future needs of people with disability, nor providing sufficient flexibility or guidance to transport operators and providers to practically fulfil their obligations under the DDA.

The Australian Government supported the second review's recommendation to modernise and improve the Transport Standards, and in August 2019, Transport Ministers at federal, state and territory levels agreed to progress the modernisation project, which would be led jointly by the Australian and Queensland Governments.

The modernisation process is being undertaken in two stages of proposed amendments to the current Transport Standards. The Stage 1 of reform identified 16 areas of reform and developed policy options to address each area, as well as a series of less substantive updates.

The proposed policy options were developed in consultation with the National Accessible Transport Steering Committee (**Steering Committee**) and the National Accessible Transport Taskforce (**Taskforce**). Collectively, these bodies include representatives from the disability community, government and the public transport industry. Extensive consultation has been undertaken through the development of policy options for each area of reform.

A Consultation Regulation Impact Statement (**Consultation RIS**) for the Stage 1 reforms was released publicly in February 2021, inviting submissions from all stakeholders, particularly those likely to be impacted in the public transport industry, as well as the disability community and state and territory governments.

The Consultation RIS sought views on whether the options would deliver on the objectives of the DDA to eliminate discrimination as far as possible against people with disability, and whether they would enable transport operators and providers to increase compliance and reduce uncertainty. As well as gauging support for the proposals and gathering evidence to inform implementation options, the consultations also informed the estimate of regulatory cost impacts.

Stage 2 of reform will include further proposed options for a wide range of issues relating to the Transport Standards. Discussions on the options for Stage 2 are underway through the Taskforce and the Steering Committee, with public consultations expected to commence formally from early 2022.

¹ Australian Bureau of Statistics, *Survey of Disability Ageing and Carers (SDAC) 2018*, accessed on 08/02/2021
www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release.

Stage 1 of reforms are now the subject of this Decision Regulation Impact Statement (**Decision RIS**) seeking in-principle approval from Transport Ministers.

The purpose of this Decision RIS is to bring together all stakeholder feedback and outline the recommended options to improve the effectiveness and efficiency of the Transport Standards. For each potential reform area, this Decision RIS has considered a range of regulatory and non-regulatory options.

Following analysis of all the available evidence, a preferred option has been put forward for each area of reform. The rationale for each preferred option is intended to inform a decision by governments, balancing the regulatory impacts of new or updated requirements against the overarching goal of the DDA and the Transport Standards to eliminate discrimination as far as possible against people with disability.

For example, in some cases non-regulatory options were preferred where they could provide greater flexibility while still achieving the same outcome for people with disability. In other cases, consultations and impact analysis supported a regulatory option, as a means to deliver the maximum possible clarity and certainty for the disability community and transport industry.

For some measures, the final options in the Decision RIS were refined from those presented in the Consultation RIS, based on feedback received from stakeholders. Where this is the case, the relevant chapter will indicate the change.

Estimated regulatory cost impacts in this Decision RIS are based on evidence provided by stakeholders through the Consultation RIS, a cost benefit analysis survey and other targeted consultations. The Department of Infrastructure, Transport, Regional Development and Communications (the **Department**), as author of this Decision RIS, thanks stakeholders for their willingness to engage in this process.

The consultation feedback presented a variety of perspectives from stakeholder groups. A key theme in responses from the disability community was the view that regulation was required to ensure change occurs, and that guidance alone is unlikely to address cases of discrimination. A key theme from responses by industry and governments was a lack of certainty about retrospectivity of new requirements. For example, identifying timeframes for bringing existing assets up to compliance if new requirements applied to existing assets. Some responses from industry and governments only supported regulatory options if the new requirements were applied to new assets only.

The summary table on the following pages outlines the preferred option for all reform areas, a brief justification for this preference based on the analysis undertaken, an illustrative estimated total cost for the preferred option and an implementation timeframe over which this estimated cost would be incurred. These figures are intended only as a guide for the potential cost of a reform option, based on an implementation schedule approach. An overview of the estimated regulatory costs for each reform area is detailed in each chapter and further information is provided at [Appendix A and B](#).

The Decision RIS for Stage 2 of the reforms will seek approval for further areas of reform and will seek a final decision on implementation timeframes for areas of reform proposed in this Decision RIS. The Stage 2 Decision RIS is expected to be submitted to ministers in late 2022.

Summary of Preferred Options for Reform Areas

Table 2: Summary of Preferred Options for Reform Areas

Reform Area	Preferred option	Rationale for preferred option	Regulatory cost (\$millions) impact over the compliance timeframe for preferred option
Staff training and communication	Regulatory with revisions	<ul style="list-style-type: none"> • Consultation showed broad support across all stakeholder groups for regulating staff training requirements. • Regulating requirements would improve the quality and consistency of staff training, reducing a barrier for people with disability to use public transport. • The regulatory cost estimate included here is a conservative or high estimate, with realised costs expected to be lower because training programs are largely currently in place and costs assumed to be already committed. 	\$142.5m over 10 years.
Mobility aid safety	Non-regulatory	<ul style="list-style-type: none"> • Consultation confirmed the safety issues relating to mobility aids on public transport and showed support across all stakeholder groups for guidance to be provided. • Guidance would assist operators and providers to improve the safety of mobility aids on trains, trams and buses, including advice on types of restraints and how to reduce dynamic forces that can cause mobility aids to tip or fall in transit. 	Nil
Priority seating	Regulatory with revisions	<ul style="list-style-type: none"> • Consultation responses supported greater consistency and clarity of priority seating requirements with a majority of responses from all stakeholder groups supporting regulation for calculating the number of priority seats. • The regulatory option was amended following consultation to strike a balance between conflicting views from the disability community and operators and providers of public transport. 	\$18.6m over five years.

Reform Area	Preferred option	Rationale for preferred option	Regulatory cost (\$millions) impact over the compliance timeframe for preferred option
Allocated spaces	Regulatory with revisions Sub-option 3 was selected as the preferred option for intrusions into the vertical space	<ul style="list-style-type: none"> • Consultation responses supported improved consistency of requirements, with varied views on whether guidance or regulation would best address the problem statement. • While the additional guidance in the non-regulatory option may assist operators and providers, there will still be a lack of regulatory certainty regarding vertical requirements of allocated spaces, manoeuvring areas and access paths which has been identified by the disability community as a safety risk and barrier to travel. • Sub-option 3 was selected as the preferred option for intrusions into the vertical space, striking a balance and compromise between stakeholder views. • The regulatory cost estimate was based on sub-option 1 (which would incur the greatest implementation costs). It can be assumed that the cost estimate of the final preferred option would be lower. 	\$5.1m over 20 years.
Digital information screens	Regulatory with revisions	<ul style="list-style-type: none"> • While responses from all stakeholder groups noted the role of digital information screens, there was varied support for either increased guidance or mandated design requirements. • The regulatory option was amended to strike a balance between varying views of the disability community and operators and providers. • Regulating outcome-focused design requirements that consider the diverse needs of people with disability will improve the consistency of information provision across jurisdictions. • Whilst the non-regulatory option may assist operators and providers, it would not resolve issues identified during consultation regarding a lack of certainty as a barrier to travel. 	\$21.1 over five years.

Reform Area	Preferred option	Rationale for preferred option	Regulatory cost (\$millions) impact over the compliance timeframe for preferred option
Lifts	Regulatory with revisions	<ul style="list-style-type: none"> • Consultation found strong support from all stakeholder groups for aspects of the regulatory option to harmonise lift requirements under the Transport Standards with the Premises Standards. • The regulatory option was amended to remove mandating lift maintenance and downtime performance requirements as there was no clear support for these aspects. • Harmonising the requirements under the Transport Standards with requirements under the Premises Standards will increase the accessibility of lifts whilst simplifying regulatory requirements for industry. • Costs associated with these new requirements will vary depending on the number of existing lifts and whether they are required to be upgraded. 	Nil
Website accessibility	Regulatory Sub-option 3 WCAG 2.1AA was selected as the preferred option for accessibility compliance requirements	<ul style="list-style-type: none"> • Regulatory reform was supported by all stakeholder groups for website accessibility. • Mandating prescriptive requirements for website design standards will contribute to eliminating discrimination against people with disability, by providing consistency across jurisdictions and confidence to users that websites will be accessible. • Sub-option 3 (WCAG 2.1 AA compliance) was supported by the majority of responses, to ensure the Transport Standards reflect industry best-practice, including provisions for mobile browsing. • The regulatory cost estimate was calculated based on sub-option 2 (mandating WCAG 2.0 AAA compliance), however it is not anticipated that the costs associated with regulating sub-option 3 will be significantly different. 	\$3.4m over five years.

Reform Area	Preferred option	Rationale for preferred option	Regulatory cost (\$millions) impact over the compliance timeframe for preferred option
Communication during service disruption	Regulatory with revisions	<ul style="list-style-type: none"> • Consultation responses noted the importance of effective communication. Views varied on whether guidance or regulation would best address the problem statement, specifically in relation to mandating requirements for unplanned disruptions. • The performance requirements regarding unplanned disruptions have been removed from the regulatory option to account for concerns raised through consultation. • The regulatory option provides clarity to operators and providers which ensures consistency in the provision of accessible information across jurisdictions and modes of transport, reducing discrimination for people with disability. • The regulatory cost estimate was informed by survey respondents to the cost-benefit analysis. Responses indicated that state and territories already provide compliant communication during disruptions. For this reason, there are no costs associated with the proposed reform. 	Nil
Gangways	Regulatory with revisions	<ul style="list-style-type: none"> • Consultation found strong support from all stakeholder groups to clearly define gangways and update the requirements for them. • The requirements for tactile ground surface indicators on the gangway treadplate were removed from the regulatory option as responses indicated there may be safety hazards associated with this. • Harmonising the requirements under the Transport Standards with requirements under the Premises Standards will increase the accessibility of gangways whilst increasing certainty and clarity on the regulatory requirements. • The regulatory costs assume a steady progression of upgrades for non-compliant gangways used by public transport operators and providers. 	\$1.8m over 20 years.

Reform Area	Preferred option	Rationale for preferred option	Regulatory cost (\$millions) impact over the compliance timeframe for preferred option
Assistance animal toileting facilities	Non-regulatory	<ul style="list-style-type: none"> • Consultation indicated assistance animal toileting facilities in locations where there aren't any appropriate toileting facilities had strong benefits for people with assistance animals. • Responses raised concerns with mandating the provision of toileting facilities, citing high costs and unclear regulatory requirements. • Guidance would encourage public transport operators and providers to develop assistance animal toileting facilities in locations where they are needed, and would help to ensure facilities provided meet best practice expectations. 	Nil
Emergency egress	Non-regulatory	<ul style="list-style-type: none"> • There was no clear support for the regulatory option identified in the consultation findings. • Improved guidance for emergency egress will support existing various emergency management guides, procedural manuals and fire evacuation protocols. 	Nil
Fit for purpose accessways	Non-regulatory	<ul style="list-style-type: none"> • Consultation responses supported improved guidance for the design of fit-for-purpose accessways. Support for the regulatory and non-regulatory options was divided between stakeholder groups. • The non-regulatory option will provide clear guidance regarding best practice design principles for fit for purpose accessways, while accommodating the diverse requirements of each public transport precinct. • While mandating prescriptive and performance based requirements through the regulatory option would ensure the broadest possible compliance, the impact analysis found that in many cases, the requirements in the regulatory option are unfeasible and inappropriate for inclusion in the Transport Standards. 	Nil

Reform Area	Preferred option	Rationale for preferred option	Regulatory cost (\$millions) impact over the compliance timeframe for preferred option
Wayfinding	Regulatory with revisions	<ul style="list-style-type: none"> • Consultation responses from all stakeholder groups acknowledged the current provisions for wayfinding are inadequate and supported improved consistency of requirements. • Most responses from all stakeholder groups supported aligning requirements in the Transport Standards, the National Construction Code and the Premises Standards. • Whilst non-regulatory guidance may assist operators and providers, it would not resolve the issues with the existing regulation's misalignment identified by stakeholders. 	\$34.4m over five years.
Tactile ground surface indicators (TGSIs)	Regulatory with revisions	<ul style="list-style-type: none"> • All stakeholder groups acknowledged the current requirements and guidelines are inadequate and supported improvements that would promote consistency and better placement of directional TGSIs. • Whilst non-regulatory guidance may assist operators and providers, it would not resolve the issues with the existing gaps and uncertainty in regulation identified by stakeholders. • Regulating requirements for directional TGSIs would safe-guard best practice and prevent any risk of decreased accessibility in the future. • Low estimated regulatory cost impact. 	\$3.7m over 20 years.
Passenger loading areas	Regulatory with revisions Sub-option 1 was selected for the number of accessible passenger loading areas	<ul style="list-style-type: none"> • Responses from all stakeholder groups noted the importance of best practice design, with varied preference for the strengthening of guidance or mandating design requirements. • A number of prescriptive requirements were amended or removed in the regulatory option to account for concerns raised through consultation and to strike a balance between differing stakeholder views. • The provision of accessible taxi rank spaces in accordance with sub-option 1 will provide a consistent level of accessibility at passenger loading areas. 	\$11m over 20 years.

Reform Area	Preferred option	Rationale for preferred option	Regulatory cost (\$millions) impact over the compliance timeframe for preferred option
Provision of information in multiple formats	Regulatory with revisions	<ul style="list-style-type: none"> • Consultation found strong support from all stakeholder groups to ensure information is provided through non-digital means. • Submissions from industry and government broadly supported the proposed regulatory requirements, as they don't prescribe specific formats be provided, but instead offer flexibility. • The regulatory requirements will ensure that people with disability who do not use digital devices can access information they need about public transport. • The transport operators and providers who provided submissions reported they already meet this requirement, so the cost impact was estimated as nil. 	Nil
Australian Standards and definitional amendments	Support all 32 regulatory amendments	<ul style="list-style-type: none"> • The primary objective of these amendments is to simplify the regulatory landscape through alignment of the Premises Standards and the Transport Standards. • Based on the consultation findings and impact analysis, the preferred option is to support all proposed amendments to references to Australian Standards in the Transport Standards. • Of the 32 amendments, 26 are expected to result in no additional costs or benefits to operators, providers, manufacturers, or states and territories. The remaining six amendments are expected to result in some, but minimal impact. 	No material impact

Total estimated regulatory impact for all measures (preferred options) is \$30.9 million per year (including \$14.2 ongoing yearly costs and \$16.7 up front costs).

1. Background

Introduction

The *Disability Discrimination Act 1992 (DDA)* makes direct and indirect discrimination on the basis of disability unlawful in key areas of public life, including employment, education, accommodation, access to premises and the provision of goods, service and facilities.

The DDA authorises the Attorney-General to make disability standards in relation to unlawful discrimination, including the Transport Standards. The purpose of the Transport Standards is to enable public transport operators and providers to remove discrimination from public transport services.²

This Decision RIS will look at 16 initial areas of reform aimed at modernising the Transport Standards to ensure:

- the removal of discrimination against people with disability is the central focus
- the full spectrum of solutions, for modernisation, are considered.

Stage 2 of reforms will be considered through a similar process with a Consultation RIS for Stage 2 to be released in 2022.

What are the Transport Standards?

The Transport Standards are one of three disability standards formulated by the Attorney-General. The other two disability standards are:

1. The Disability (Access to Premises – Buildings) Standards 2010 (**Premises Standards**) that aim to provide people with disability dignified, equitable cost-effective and reasonably achievable access to buildings, and facilities and services within buildings, and to provide certainty to industry that they are complying with the DDA.
2. The Disability Standards for Education 2005 (**Education Standards**) that clarify the obligations of education and training providers, and seek to ensure that students with disability can access and participate in education on the same basis as other students.

Why do they matter?

Transport is a key enabler for people with disability as it allows them to access work, community, education and healthcare. People with disability are ten times more likely than those without disability to rate their health as poor, highlighting the need for increased access to healthcare services.³

A nationally consistent level of standards for public transport improves clarity around requirements for all public transport operators and providers, and provides people with disability the certainty that enables them to feel safe during their journeys. This national consistency also means Australian governments and industry can take advantage of economies of scale when purchasing or producing public transport infrastructure and conveyances.

In 2018 there were 4.4 million Australians with disability, or 17.7 per cent of the population. The role of the Transport Standards in supporting their access to a broader range of transport options can reduce reliance on private transport. This in turn can support a number of public benefits, such as reduced congestion, improved road safety and increased workforce participation. Carers and companions can also benefit if more people with disability have the confidence to

² Commonwealth Consolidated Acts. *Disability Discrimination Act 1992*. Section 31. Disability Standards. Available http://www5.austlii.edu.au/au/legis/cth/consol_act/dda1992264/s31.html

³ Australian Institute of Health and Welfare (2018). *Australia's Health 2018*. Australia's health series no. 16.

travel independently. Higher use of public transport by people with disability may also reduce the call on NDIS funding for private transport services.

An accessible public transport system is important to plan for Australia's ageing population. The proportion of people aged over 65, currently 15 per cent of our population, is projected to grow to 21 per cent of a significantly larger overall population by 2066.⁴ The prevalence of disability increases with age. In 2018 one in two (49.6 per cent) people aged 65 years and over had a disability.⁵

Older Australians often rely more on public transport and are more likely to travel off-peak. Older people are at greater risk of experiencing social isolation and loneliness, meaning their ability to connect with others is especially critical. The national consistency provided by the Transport Standards is important in ensuring a comparable level of public transport access to older Australians around the country.

Applying the Transport Standards

For all (new) public transport conveyances, infrastructure and premises brought into use for public transport service *after* 23 October 2002, operators and providers must ensure they are 100 per cent compliant with the Transport Standards. For all conveyances, infrastructure and premises that were in use *prior to* 23 October 2002, the Transport Standards provide a schedule for compliance (see Table 4).

Table 3: Important Definitions for Interpreting the Transport Standards

Term	Definition
Premises	Premises are structures, buildings or attached facilities that an operator provides for passenger use as part of a public transport service. ⁶
Infrastructure	Infrastructure is any structure or facility that is used by passengers in conjunction with travelling on a public transport service. ⁷
Conveyances	A conveyance includes any of the following, to the extent that they are used to provide a public transport service: aircraft, buses or coaches, ferries, taxis, trains, trams, light rail, monorails, rack railways; and any other rolling stock, vehicle or vessel classified as public transport within its jurisdiction by regulation or administrative action of any Government in Australia. ⁸
Operator	An operator is a person or organisation (including the staff of the organisation) that provides a public transport service to the public or to sections of the public. A public transport service may have more than one operator.
Provider	A provider is a person or organisation that is responsible for the supply or maintenance of public transport infrastructure. A provider need not be an operator.
Public transport service	An enterprise that conveys members of the public by land, water or air, and includes both publicly and privately owned services.

⁴ Australian Bureau of Statistics, Population Projects, Australia, 2017 (base) – 2066 (Cat. No. 3222.0). Available <<https://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/3222.0>>.

⁵ Australian Bureau of Statistics, 2018 Disability, Ageing and Carers, Australia: Summary of Findings

⁶ Many aspects surrounding public transport premises were moved from the Transport Standards to the Premises Standards 2010 when the latter came into force. However, there are other aspects that still remain with the Transport Standards (these are specified in the Transport Standards). The Premises Standards are administered by the Department of Industry, Science, Energy and Resources.

⁷ Infrastructure does not include any area beyond immediate boarding points (for example, bus stops, wharves, ranks, rail stations, terminals).

⁸ A conveyance does not include charter boats (including water taxis), limousines (including chauffeured hire cars) or self-drive rental cars.

Source: Transport Standards, Part 1.

The Transport Standards are legally binding for public transport providers and operators. Section 32 of the DDA states ‘it is unlawful for a person to contravene a disability standard’.

The main compliance mechanism is through a complaints process. Individuals can lodge unlawful discrimination complaints with the Australian Human Rights Commission (AHRC). The AHRC has the power to investigate and attempt to conciliate complaints of disability discrimination. If the conciliation is unsuccessful, in certain cases an individual can commence legal proceedings regarding the complaint in the Federal Court of Australia or the Federal Circuit Court.

In light of the challenges associated with replacing or retrofitting existing public transport assets on long replacement cycles, the Transport Standards contain progressive compliance timeframes between 2007 and 2032, summarised in Table 1. Compliance is the responsibility of operators and providers across all jurisdictions. Modes of public transport subject to the Transport Standards include train, tram, light rail, bus and coach, aircraft and taxi services. However, it is difficult to monitor the progress of compliance, as there is currently no mandatory national reporting.

Table 4: Target Compliance to the Transport Standards

Compliance year	2007	2012	2017	2022	2032
Target compliance	25 %	55 %	80 %–90 %	100 % Everything except rolling stock ⁹ which is set at 90 %	100 % Everything including rolling stock

Source: Transport Standards, Schedule 1.

The targets shown in the table are averaged across the range of conveyances, premises and infrastructure.

Intersection with the Premises Standards

The Premises Standards are national standards that specify the requirements for disability access to public buildings. The Transport Standards apply to operators and providers of public transport services, and specify requirements for the accessibility of the premises, conveyances and infrastructure. To avoid duplication of requirements for public transport buildings under the two standards, relevant requirements for public transport ‘premises’ previously covered under the Transport Standards were transferred to the Premises Standards.

The current Transport Standards released in May 2011 reflect these changes in the Disability Standards for Accessible Public Transport Amendment 2010 (No. 1). The requirements in the Transport Standards only apply to public transport premises to which the Premises Standards do not apply¹⁰.

Currently, the two standards are not identical, mainly because they reference different Australian Standards, which contain different specifications. A recommendation of the second review of the Transport Standards called for harmonisation of provisions under the Transport Standards and Premises Standards to ensure consistency where public transport premises and infrastructure interact.

This modernisation process aims to promote harmonisation between the two standards, with continued close engagement and collaboration between the Department and the Department of Industry, Science, Energy and Resources seen as critical to ensuring future consistency of requirements.

⁹ Rolling stock includes locomotives, carriages, wagons, or other vehicles used as part of passenger rail and tram services.

¹⁰ Disability (Access to Premises – Buildings) Standards 2010, Part H2. Available <https://www.legislation.gov.au/Details/F2020C00976>

Reviews of the Transport Standards

Part 34 of the Transport Standards requires the Minister for Infrastructure, Transport and Regional Development, in consultation with the Attorney-General, to review the efficiency and effectiveness of the Transport Standards within five years of them taking effect, with subsequent reviews every five years.

The first five-year review commenced in 2007 with the final report and Australian Government response released in June 2011. The second five-year review commenced in 2012 with the final report and Australian Government response released in July 2015. The third five-year review is currently underway and the Department anticipates the final review report will be released in the second half of 2021.

In the context of the five-yearly reviews:

- **Effectiveness** refers to how well the Transport Standards have been able to reduce or remove discrimination against people with disability when accessing public transport.
- **Efficiency** refers to the costs operators and providers incur in making the required changes to comply with the Transport Standards. This involves designing the Transport Standards so they avoid imposing avoidable burdens, while still achieving the Australian Government's desired policy objectives.

2. Problem Statement

The second Transport Standards review concluded that whilst the standards had overall been effective in reducing discrimination, they are not optimal in their current form.¹¹ It recognised that there is currently insufficient clarity, flexibility or guidance for operators and providers to fulfil their obligations under the DDA in some instances, which can lead to situations where:

- Adopting certain provisions may not lead to an ideal outcome for people with disability, which reduces the effectiveness of those provisions.
- It is impractical or unfeasible for transport operators and providers to comply with certain provisions, which reduces the efficiency of those provisions.
- There can be inconsistent outcomes or errors with interpreting and navigating the Transport Standards.

The effectiveness of the Transport Standards is vital for people with disability to fully engage and participate in the community. Without sufficient accessibility, people with disability can experience social exclusion, increased travel times and costs, reduced employment opportunities and a higher risk of safety incidents.

The key stakeholder groups affected by the effectiveness and efficiency of the Transport Standards are:

- The disability community, including people with disability, their carers and representatives. This is the main group affected by the effectiveness of the Transport Standards.
- Public transport providers and operators, which are publicly or privately owned. This group is mainly affected by the efficiency of the Transport Standards.

Insufficient Clarity

Previous Transport Standards reviews noted some standards lack clarity, which increases uncertainty for public transport operators, providers and the disability community. The lack of clarity in the current Transport Standards includes:

- Some provisions where the requirements and intentions are unclear.
- Some provisions referencing older Australian Standards such as AS1428.2 (1992). This Australian Standard is referenced in over 30 per cent of the Transport Standards prescriptive technical standards and many requirements are outdated or inconsistent with modern standards that operators and providers must also comply with.
- Some inconsistencies between the Transport Standards and the Premises Standards, largely due to referencing different Australian Standards.

These issues can reduce the effectiveness and efficiency of provisions in the Transport Standards, through:

- Increasing the costs of interpreting and navigating the standards, for public transport providers and operators, and for people with disability and their representatives.
- Increasing the risk of public transport operators and providers and government unintentionally purchasing or funding non-compliant conveyances, infrastructure and/or premises.

The second review also recognised the current approach of referencing Australian Standards in the Transport Standards can make interpretation of the requirements difficult for operators and providers and people with disability. In addition,

¹¹ Department of Infrastructure, *Transport Standards review*, July 2015, p. 10.

many of the Australian Standards referenced are not purpose-designed for the transport sector and often do not translate well for transport conveyances and infrastructure.¹²

Insufficient Flexibility

Although the Transport Standards contain a mix of requirements, they are predominantly prescriptive in nature. This reflects their intention to provide a high level of certainty and guidance for public transport providers and operators who have obligations under the DDA.¹³

For example, Section 3.1 of the Transport Standards is prescriptive, stating that the circulation space for a 180-degree wheelchair turn must comply Australian Standard 1428.2 (1992) Clause 6.2.

On the other hand, a number of the Transport Standards are performance based, as with Section 27.1 which requires 'general information about transport services' to be accessible to all passengers.

The second review recommended the standards be amended to provide more flexibility for different public transport modes and operating environments.¹⁴ Insufficient flexibility in these prescriptive standards can lead to situations where it is impractical to comply with certain provisions or where compliance could be achieved through alternative performance based solutions which may provide even better outcomes.

¹² Ibid, p.158.

¹³ Department of Infrastructure, *Transport Standards review*, July 2015, p. 87.

¹⁴ Department of Infrastructure, *Transport Standards review*, July 2015, p.10.

3. Objectives of Government Action

Purpose of the Decision RIS

The intention of the Transport Standards reform process is to deliver modernised standards with the removal of discrimination against people with disability as the central focus.

The reform process consists of two policy design stages and a third legislative stage:

- **Stage 1** of the reform process commenced in September 2019 with the Stage 1 Consultation RIS being released for public comment on 12 February 2021. This Decision RIS was developed as a result of those consultations.
- **Stage 2** of the reform process commenced in January 2021 with the Stage 2 Consultation RIS to be released in early 2022 and the Decision RIS to be provided to Transport Ministers for consideration in late 2022.
- **Legislative amendment** and adoption processes are scheduled to be undertaken in 2023.

Following the conclusion of Stage 1 consultations and analysis of the available evidence, a preferred option has been put forward in this Decision RIS for each reform area. Where consultations and analysis had identified that guidance alone would be insufficient to address the discriminatory outcomes that had been recognised, government action has been recommended through the regulatory option.

[Reform process governance](#)

The National Accessible Transport Taskforce (Taskforce)

The Taskforce, comprising representation from the disability community, governments, industry and subject matter experts, commenced work in 2019 following the endorsement of the reform process by Transport Ministers. The Taskforce agreed to convene a number of working groups to examine possible reform proposals.

Table 5: Working Group Governance

Working Group	Convenor
Principles Working Group	Department of Infrastructure, Transport, Regional Development and Communications
Infrastructure and Facilities Working Group	Victorian Department of Transport
Mobility Working Group	Department of Transport and Main Roads QLD
Safety Working Group	Transport for NSW
ICT Working Group	Transport for NSW
Communications Working Group	Australasian Railway Association

The National Accessible Transport Steering Committee (Steering Committee)

The Steering Committee was formed to oversee the reform process at a high level and ensure a national perspective is achieved. The Steering Committee, chaired by the Australian Government, is comprised of senior officials from the Attorney General's Department, the Australian Human Rights Commission, Queensland, South Australia, New South Wales and Victorian Governments. The Steering Committee provides oversight and direction to the Taskforce and reports to the Infrastructure and Transport Senior Officials Committee (ITSOC).

[Selection of reform proposals](#)

The Taskforce and the Steering Committee worked to identify potential areas for modernisation, developing a longlist of over possible reform issues in the Transport Standards.

Selected reform areas were then prioritised for Stage 1 based on their impact in reducing discrimination, or because they could be developed and progressed rapidly through industry, disability community and government cooperation. A list of 16 issues were identified as suitable for Stage 1 based on one or both of these criteria.

Issues which were likely to take more time to consult on and develop were assigned to Stage 2 of the reform process.

4. Consultation

Feedback on Stage 1 Consultation RIS

The Department released the Stage 1 Consultation RIS for public comment on 12 February 2021 with submissions closing on 23 April 2021. The disability community, governments, industry and the wider community were invited to respond.

Through the Consultation RIS, feedback was sought on the proposed options. The Consultation RIS provided the platform for stakeholders to consider the impacts and costs of the options to assist in the development of modernised Transport Standards.

The Department, Department of Transport and Main Roads QLD, the Taskforce and the Steering Committee would like to thank all those who engaged in the consultation process, and for the time and insights they were able to provide to inform the development of this Decision RIS. A copy of the Consultation RIS is available at:

<https://www.infrastructure.gov.au/transport/disabilities/reform/index.aspx>

Submissions, Surveys and Online Consultations

Stakeholders were provided a number of means by which responses could be provided. These included formal written submissions, phone, surveys (both short and long) and professionally facilitated online forums to support public participation. A summary is provided below.

Table 6: Method of Consultation Responses

Method	Responses
Formal written responses	38
Verbally via the Transport Standards (phone) feedback line	1
Surveys - disability community and general public	99
Surveys - public transport operators	9
Online forums to support public participation	51

In relation to formal submissions provided, the following provides a summary by stakeholder group.

Table 7: Summary of Formal Written Responses by Stakeholder Group

Formal written responses by group	Responses
Disability community organisations	17
Individual disability community members	7
State and Territory Governments	4*
Local Governments	3
Industry	7
Universities	1

*1 government response was received after the Decision RIS was drafted and was unable to be incorporated

5. Reform Options and Impact Analysis

Scope of Reforms

[Stage 1](#)

The Stage 1 Decision RIS incorporates updated and relevant information collected from stakeholders during the consultation process. The RIS discusses the options provided (status quo, non-regulatory and regulatory), and stakeholder responses to those options, and makes recommendations to transport ministers as to what options should be adopted as part of the reform process.

The following Stage 1 issues have been addressed in this Decision RIS.

Table 8: Stage 1 Reform Areas

Section	Title
Section 5.1	Staff training and communication
Section 5.2	Mobility aid safety
Section 5.3	Priority seating
Section 5.4	Allocated spaces in transit
Section 5.5	Digital information screens
Section 5.6	Lifts
Section 5.7	Website accessibility
Section 5.8	Communication during service disruption
Section 5.9	Gangways
Section 5.10	Assistance animal toileting facilities
Section 5.11	Emergency egress
Section 5.12	Fit-for-purpose accessways
Section 5.13	Wayfinding
Section 5.14	Tactile ground surface indicators
Section 5.15	Passenger loading areas
Section 5.16	Provision of information in multiple formats
Section 5.17	References to Australian Standards

[Stage 2](#)

Stage 2 reforms will be considered through a similar process, with a Consultation RIS for Stage 2 anticipated to be released in early 2022 and a subsequent Decision RIS to be provided to transport ministers in late 2022.

Stage 2 concerns a longer list of more complex reform proposals than Stage 1. A number of the Stage 2 proposals also concern major Transport Standards structural elements.

It is anticipated that a process of alignment will need to occur once Stage 2 has been finalised to ensure decisions made in Stage 1 and 2 are consistent and support a holistic legislative amendment process.

Reform Options

For each of the reform issues addressed, the respective sections are structured as follows:

- Problem and options
- Consultation findings
- Impact analysis
- Preferred option

- Implementation options.

For all reforms except Mobility aid safety (Section 5.2), three options were provided:

1. Status Quo
2. Non-regulatory
3. Regulatory.

The mobility aid safety proposal only contains a status quo and non-regulatory proposal. Two of the regulatory options, priority seating and allocated spaces in transit, contain a number of sub-options.

Progressing non-regulatory proposals

All of the non-regulatory reform proposals put forward in this Decision RIS will be achieved through the provision of guidance, or improvements to existing guidance.

This will be achieved through inserting or adjusting guidance in either the *Disability Standards for Accessible Public Transport Guidelines 2004 (No.3) (Transport Standards Guidelines)* or *The Whole Journey Guide: A guide for thinking beyond compliance to create accessible public transport journeys (The Whole Journey Guide)*.

The purpose of the Transport Standards Guidelines is to assist in the understanding and interpretation of the Transport Standards.¹⁵

The purpose of The Whole Journey Guide is to encourage policy makers, planners, designers, builders, certifiers and operators to think beyond compliance (with the Transport Standards) and the physical and governance boundaries of services and infrastructure, and focus instead on people's accessibility needs across their whole journey.¹⁶

Decision RIS Cost-Benefit Analysis (CBA)

The Decision RIS cost-benefit analysis (CBA) was undertaken by PricewaterhouseCoopers Consulting (Australia) on behalf of the Department. The CBA report was produced for the Department's use to inform the development of the Decision RIS¹⁷. The CBA report provides a high level analysis of estimated impacts of the proposed reforms nationally. The costs and benefits represent indicative figures and are illustrative estimates based on survey responses and a range of simplifying assumptions.

PricewaterhouseCoopers distributed surveys to state and territory governments, who were asked to distribute to relevant operators and providers within their jurisdictions. The cost benefit analysis was informed in the first instance by survey responses provided by state and territory governments and operators. While the survey responses and assumption-based extrapolation and proxies provided a number of the inputs for the cost analysis, gaps that remained were addressed through a review of relevant published literature and consultation with stakeholders and the Department.

The returned Consultation RIS responses and survey data provided information regarding volume inputs and affected population, but did not provide comprehensive coverage across all jurisdictions, regions, public transport modes and reform proposals. For this reason and the complexity of estimating nation-wide costs and benefits across disparate data sets, a range of assumptions were applied where necessary to estimate costs and benefits of the proposed reforms. The impact analysis sections of each reform area explore the assumptions made in the cost-benefit analysis.

The analysis included initial and ongoing costs and benefits from a community-wide perspective. Qualitative benefits were also captured through discussion of the reform areas and scenarios. The CBA did not cost the status quo option as there is no change in either costs or benefits incurred as a result of that option. Similarly, the CBA does not cost the non-

¹⁵ Disability Standards for Accessible Public Transport Guidelines 2004 (No.3) pg.7

¹⁶ <https://www.infrastructure.gov.au/transport/disabilities/whole-journey/index.aspx>

¹⁷ The CBA report was prepared solely for the Department of Infrastructure, Transport, Regional Development and Communications' use and benefit in accordance with and for the purpose set out in PricewaterhouseCoopers Consulting (Australia) Pty Ltd's work order with the Department dated 5 February 2021.

regulatory option. These options do not propose any regulatory change and permit a range of responses from transport operators and providers, and can therefore result in a similarly wide range of benefits and costs (ranging from a scenario close to the status quo, to a scenario close to the full regulatory option).

Stakeholder survey results indicated that several reform areas have high levels of existing compliance, resulting in the estimated costs associated with those reforms being lower than otherwise.

Cost Approach

The information received through survey responses, review of published literature and consultation with stakeholders informed the costs for the CBA. The estimated costs were analysed for each reform area at a mode level for each jurisdiction.

The costs included are those estimated direct costs associated with sourcing, installation, and ongoing repair of changes to comply with the proposed requirements.

Further information regarding costs is explored in the impacts analysis of each chapter and at [Appendix B](#).

Benefits Framework

The accessibility of public transport has been widely recognised as being difficult to quantify. Accordingly, the benefits framework for the proposed changes to the Transport Standards is designed to capture benefits both quantitatively and qualitatively. The quantitative benefits associated with the regulatory changes are captured in the CBA through amenity benefits, safety benefits and patronage benefits.

Amenity Benefit

Amenity benefit refers to the potential of reforms to improve the quality of travel for people with disability and also broader public transport users. Public transport users value the experience of their journey, with the condition of facilities forming a significant component of a user's experience.

Part of a public transport journey includes time spent in, for instance stations, bus stops, wharves, and interchanging, with research showing that public transport users are willing-to-pay for an improvement in the appearance or 'quality' of a facility.

The approach to quantify and monetise amenity benefit involved four key steps:

1. Identification of reform area amenity categories from the Monash University Public Transport Amenity Values framework to apply in-vehicle time (IVT) values
2. Identification of the base case level of amenity to measure the incremental amount to the existing level of amenity
3. Assess in-scope public transport users by estimating the annual public transport patronage and further estimating the number of users that would be impacted by the reforms
4. Using a monetisation factor of 'the value of travel time' to translate the IVT change into a monetised benefit.

Induced Demand Benefit

Improving the amenity and accessibility of public transport infrastructure is also expected to result in increased usage of public transport, in particular for the specific demographic of users targeted by the reforms (for example people who are mobility impaired).

Improved navigation around public transport, more accessible information, as well as improved safety and physical accessibility are all expected to contribute to increased uptake, in particular focusing on people with disability.

Safety Benefit

Certain reforms are expected to result in a reduction in incidents (slips, trips and falls) on public transport, which is particularly important for travellers with disability. To estimate the safety benefit associated with the reforms, an estimate on the number of safety incidents on public transport and the estimated cost by injury type was used.

Non-monetised Benefits

Several additional benefits of the reforms were identified that have been discussed qualitatively. These benefits relate to:

- Increased optionality – Improved accessibility of public transport is expected to provide an alternative transport option to people with disability. This has the potential to improve engagement and accessibility of other services. This may also reduce costs to the user as other methods of transport may prove costlier than public transport.
- Improved engagement – Improved access to public transport is expected to allow people with disability to more easily engage with the community and activities including employment. This is expected to decrease barriers and reduce costs.
- Improved access to other government services – It is expected that through provision of access to public transport, people with disability will have greater access to services and may be less reliant on other modes of transport.
- Decreased cost borne by other public services – It is expected that changes to the Transport Standards will lessen burdens placed on government and public services due to inaccessibility of public transport.

Further information regarding benefits is explored in the impacts section of each chapter.

Compliance and Implementation

Public transport operators and providers across all jurisdictions are responsible for compliance with the Transport Standards. The current Transport Standards contain progressive compliance timeframes between 2007 and 2032, summarised in Table 4. This staged approach recognises the challenges associated with replacing or retrofitting existing public transport assets.

However, potential changes to the current compliance and reporting arrangements are in scope for consultations for Stage 2 of the modernisation process. Any proposals for change, including advice regarding the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate, will be brought to Transport Ministers at the conclusion of Stage 2 (currently scheduled the end of 2022).

An assumption underpinning the cost-benefit analysis was that the timetable for implementation of the reforms will be 'like-for-like' with the current compliance target dates outlined in Schedule 1 of the Transport Standards. The costings reflect the assumption that amendments will be applied retrospectively to existing assets, taking into account a staggered timeframe for reaching compliance with any new amendments. The assumptions and timeframes for implementation for the reform areas are discussed in each chapter.

Final implementation for Stage 1 reforms, including whether the amendments will be applied retrospectively or prospectively, will be brought to Transport Ministers for consideration in late 2022. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

Evaluation

As detailed above, currently the primary enforcement mechanism under the Transport Standards is a formal complaints process managed by the AHRC. There is no mandatory national reporting regime applicable to the Transport Standards, which makes monitoring compliance difficult. Stage 2 of the reforms will look at improvements that can be made to compliance reporting. Depending on the outcomes of the consultation process, any resulting changes to reporting would be brought back to Transport Ministers for decision (anticipated for end 2022).

5.1 Staff Training and Communication

5.1.1 Problem and options

There are currently no regulatory requirements for staff training in the Transport Standards.

Disability awareness training is internationally recognised as a key component of providing accessibility, both in public transport and in other sectors. For example, Canada has regulations for transport personnel training for the assistance of people with disability, with requirements for reporting and regular refresher training.¹⁸ Frontline and managerial staff training is also a key component of the UK Inclusive Transport Strategy.¹⁹ The Education Standards recommends that timely, relevant and ongoing professional development is provided to staff to ensure they are equipped with the knowledge and skills to enable students with disability to participate in educational programmes or services.²⁰

Several articles (4, 8, 9 and 20) in the Convention on the Rights of Persons with Disabilities²¹ make reference to eliminating discrimination and implementing training programs for stakeholders and staff on how to best assist and support people with disability to access their services, including transportation.

The interactions between staff and customers with disability can affect the extent to which people with disability access public transport. A number of public transport operators and providers already deliver disability awareness training to staff, and there are requirements for disability awareness training in some state-based legislation. Where public transport employees, platform and booking staff provide empathetic and exemplary service, this assists people with disability undertake successful public transport journeys.

Inclusion of provisions relating to disability awareness training and how best to support customers with disability in the Transport Standards will reinforce a continuous improvement approach to accessible public transport.

Table 9: Summary of Options for Staff Training and Communication

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Additional guidance would be included in the Transport Standards Guidelines and The Whole Journey Guide to provide advice on the provision, development and implementation of staff training.
Regulatory	A new section would be inserted into the Transport Standards which specifies performance requirements for the provision, development and implementation of staff training. This would be supported by further information in the Transport Standards Guidelines.

5.1.2 Consultation Findings

All responses identified staff training as a priority issue. There was overwhelming acknowledgement across all groups that training is essential in improving the public transport experience of people with disability. There was broad support, including from operators and providers, for regulatory amendments, however views varied on some of the specific performance requirements to be mandated.

¹⁸ Accessible Transportation for Persons with Disabilities Regulations 2009 (Canada), Part 1 Personnel Training for the Assistance of Persons with Disabilities.

¹⁹ Department for Transport (2018) *The Inclusive Transport Strategy: achieving equal access for disabled people* Department for Transport, United Kingdom at <https://www.gov.uk/df>, accessed on 30 September 2020.

²⁰ Australian Government Department of Education Skills and Employment Disability Standards for Education 2005 at <https://www.education.gov.au/disability-standards-education-2005>, accessed on 30 September 2020.

²¹ Convention on the Rights of Persons with Disabilities <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html>, accessed on 15 July 2021

All disability organisations and individuals who provided a specific response on this reform area supported mandatory requirements and expressed broad support for ensuring co-design practices in the design, development and implementation of training programs. Across the online workshops and the surveys, staff training and communication was consistently identified as the highest priority reform area that would deliver the greatest benefit through the regulatory amendments. A common theme was that regulation would ensure consistency of training, which would lead to better accessibility outcomes and improved confidence and certainty of travel for people with disability.

Interactions [with staff] make me very nervous about taking public transport. On my way to the bus stop I wonder am I going to be criticised today? Am I going to be made fun of? Are other passengers going to laugh at me? It's awful.

Anonymous survey respondent

There's a general "fear" of how people treat people with disability and the language used ...there's a lack of awareness of how to treat people with a disability

Richard, online workshop participant

...the training and attitudes of frontline service staff are frequently the defining factor in [the] experience [of a person with disability] in using public transport

Advocacy Tasmania

An important consideration that was also raised through disability community responses was ensuring mandated training is supported with accurate monitoring of training records. This will ensure the efficacy of training provide can be monitored, highlighting that the capacity to evaluate is critical.

Disability organisations also acknowledged the strengths of performance based requirements which allow for the flexibility necessary to accommodate for varying disabilities as there is not a 'one size fits all' approach to training. Staff training is critical in getting the balance right between providing direct assistance for people with disability while also allowing for independent travel.

The disability community disagreed strongly with any approach that was guidance-based, expressing concerns that if requirements are not regulated, there is no accountability or enforcement to ensure operators and providers comply.

Anything that's voluntary just won't happen

Kerry, online workshop participant

If it's not regulated, some stakeholders will not implement changes

Leanne, online workshop participant

A majority of operators and providers supported regulatory change. However, there were varied views on some of the regulatory performance requirements. Responses also indicated that the majority of operators and providers already provide disability awareness training in their organisations across a number of mechanisms.

A small number of responses from operators and providers supported the status quo or non-regulatory option, largely due to the fact that disability training already occurs in practice. Further, there was a view that the proposed regulatory option is too prescriptive and non-regulatory guidance provides flexibility in delivery method and frequency.

These responses identified that strengthening guidance, especially around the co-design and consultation elements, would be sufficient and promote best practice and that it is not necessary to regulate elements that can be directly related to customer service.

A strong theme throughout operator and provider responses was that while training should be targeted to meet specific roles and responsibilities of staff, some aspects of the proposed regulatory requirements may be better placed in guidance only to ensure flexibility and scalability in the development and delivery of training programs. These included:

- Mandatory requirements that training for trainers must be conducted by a person with disability.

- Conducting and co-presenting training with people with disability or organisations representing people with disability.
- Enforcing mandatory requirements that hypothetical scenarios of personal experiences need to be included in training programs.

Some operators and providers highlighted that feasibility considerations around co-design, such as the capacity of the disability sector, potential remuneration, regulation of service providers who deliver training and the ability to measure the quality of training need to be further explored prior to mandating co-design requirements.

Other operators and providers argued that regulatory change is required to ensure that training equips frontline staff with all the skills necessary to interact with passengers in a way that does not discriminate against people with disability.

Where non-regulatory solutions were proposed by operators and providers, it was identified that tailored training, including refresher training, to meet the specific roles and responsibilities of staff, were key aspects of reform.

Overall, responses indicated that staff training and communication is a critical issue which impacts the safety and confidence of people to use public transport.

Disability awareness is key... it is the catalyst for change... the more that people are aware, the easier the conversations around access become

Dane, online workshop participant

5.1.3 Impact Analysis

Status Quo Option

No change is made to the current Transport Standards text and no new guidance issued. Part 37 of the Transport Standards Guidelines currently provides guidance to public transport operators concerning staff attitude, orientation, education and customer service programs.

Eliminating Discrimination

The status quo will not address discriminatory outcomes that are currently occurring. People with disability will continue to experience the issues outlined in the problem statement.

Key Impacts

- This option would not involve any new costs to operators and providers. Operators and providers would continue to cover the costs of any training programs currently in place or that are voluntarily implemented in the future.
- The option would not introduce additional regulatory burden or associated administrative costs.
- There will be a lost opportunity to improve and strengthen staff training requirements to address the concerns raised through the consultation process.

Impacted Parties

Individuals

People with disability may continue to experience sub-optimal engagement with public transport staff where training has not been implemented. People with disability will not be assured that public transport staff are adequately trained in relation to disability awareness and assisting people with varying disabilities. This may lead to stress, anxiety and a barrier to using public transport will remain.

Operators and Providers

Operators and providers will not incur any additional costs and will continue to provide staff training in line with current practice. Operators and providers will have discretion as to how they train their staff.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo scenario.

Non-regulatory Option

Additional guidance is included in the Transport Standards Guidelines and The Whole Journey Guide to provide advice on the provision, development and implementation of staff training. Guidance would also encourage operators and providers to maintain and monitor training records to review the efficacy of training provided.

Guidance would outline that operators and providers should:

- conduct tailored training to meet the specific roles and responsibilities of staff, for example, customer service, bus drivers, railway platform, policy, procurement.
- conduct refresher training, which could take into account complaints by people with disability.
- consult with people with disability, or groups representing people with disability, when developing and reviewing training materials to ensure appropriate content is included.
- ensure training is delivered by a qualified trainer and training for the trainers to be conducted by people with disability.
- conduct or co-present training with people with disability or with organisations representing people with disability.
- conduct training which includes hypothetical scenarios of people with disability experiencing both positive and negative interaction with public transport staff.

Eliminating Discrimination

To the extent that guidance is followed, discrimination against people with disability will be reduced by ensuring staff training is fit-for-purpose so that customer facing staff are proficient in interacting with passengers in a way that does not discriminate against people with disability.

The level of reduction of discrimination is scalable and cannot be guaranteed due to the discretionary nature of the option.

Key Impacts

- Improved capability and strengthened expectations of operators and providers to provide adequate training for their staff.
- To the extent that guidance is followed, improved interactions between public transport staff and passengers.
- Flexibility in the design, implementation and delivery of training allows for scalability. However, flexibility does not provide a level of consistency of the minimum standards for staff training across jurisdictions and public transport modes.
 - For example, a driver in one jurisdiction may have been provided appropriate training and can operate a lift in a high floor bus effectively. Another bus driver may not have received the same training and may have difficulties operating the lift for a passenger.
- Limited certainty that operators and providers will implement fit-for-purpose training programs and the benefits will only be realised to the extent that guidance is implemented.
- Where training programs do not currently exist or need to be amended to suit the additional guidance, implementation, design and delivery costs will be incurred.
 - Costs will only be incurred to the level that guidance is implemented.
 - Operators and providers can manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Impacted Parties

Individuals

To the extent that guidance is adopted, passengers will benefit from an increased level of safety, improved confidence and certainty of travel. As the implementation of staff training cannot be guaranteed (nor its consistency), people with disability may still experience anxiety and stress around interactions with staff which will continue to act as a barrier for public transport use.

Operators and Providers

Operators and providers will bear the cost of implementing any training programs that are not currently in place or amending existing training to meet additional guidance. Costs can be mitigated and managed on an individual basis due to the scalable nature of this option. Operators and providers may need to engage with the disability community and disability organisations in design and delivery of training programs.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

A new section is inserted into the Transport Standards which specifies performance requirements for the provision, development and implementation of staff training.

The new section in the Transport Standards would specify that public transport operators and providers must:

- Conduct tailored training to meet the specific roles and responsibilities of staff, for example, customer service, bus drivers, railway platform, policy, procurement.
- Conduct refresher training, which could take into account complaints by people with disability.
- Consult with people with disability, or groups representing people with disability, when developing and reviewing training materials to ensure appropriate content is included.
- Ensure training is delivered by a qualified trainer.

The mandatory performance based elements above have been slightly amended to provide greater clarity and remove duplication.

Following feedback through the Consultation RIS, the features for this option have been refined.

Major deviations from the Consultation RIS include removing the following elements as mandatory requirements in revised Transport Standards, to instead be included as guidance in the Transport Standards Guidelines and The Whole Journey Guide:

- Conducting or co-presenting training with people with disability or with organisations representing people with disability.
- Conducting training which includes hypothetical scenarios of people with disability experiencing both positive and negative interaction with public transport staff.
- Training for the trainers to be conducted by people with disability.

This change responds to concerns that staff training requirements should not be too prescriptive, should be scalable to account for different sizes of businesses, and provide flexibility in content and delivery. Mandating requirements to include hypothetical scenarios in training programs was seen as overly prescriptive. There were some challenges identified with mandating requirements for training to be co-presented or conducted by people with disability or organisations representing people with disability. These included the capacity of the disability sector to be engaged, potential remuneration for the disability sector, regulation of service providers who deliver training and the ability to measure the quality of training. Including these requirements in guidance and in the Transport Standards Guidelines allows for an outcomes based approach where the benefits of engagement with the disability sector can be realised through promoting best practice and co-design where possible.

Eliminating Discrimination

The regulatory option will provide the greatest opportunity to reduce discrimination against people with disability.

Mandating staff training requirements will provide the certainty that disability awareness training programs are implemented consistently across public transport networks. Poor interactions with staff are a barrier for people with disability to use public transport and they may be treated differently to people without a disability due to a lack of proficiently trained staff.

The performance based requirements improve the quality of training and will ensure customer facing staff are adequately trained and proficient in interacting with passengers in a way that does not discriminate against people with disability.

Integrating the disability community in the design of training programs will ensure training is fit-for-purpose to meet the varying needs of all passengers with disability. Discrimination will be reduced by ensuring staff are adequately equipped to provide quality customer service to meet the needs of all passengers.

Regulating staff training requirements would also safe-guard best practice and prevent any future dis-benefit. That is, any changes by operators and providers that could result in decreased accessibility in the future is prevented by implementation of the reform.

Key Impacts

- Improved quality of training and proficiency of frontline staff leading to better interactions between staff and people with disability.
- While providing regulatory clarity, regulation will impose an additional burden on operators and providers to comply with new requirements.
- Consistency of minimum standards for staff training across jurisdictions and modes of transport.
- Refresher training provides opportunity to ensure training is up to date and takes into account the evolving needs of people with disability. However, refresher training will increase the quantity of training operators and providers are required to deliver and they will be responsible for reviewing and updating training materials periodically.
- Consultation will ensure training content is fit-for-purpose to ensure organisations are equipped to meet the needs of people with disability.
- Operators and providers will be required to engage with the disability community on training content. This may be more burdensome for smaller operators and providers due to fewer resources and potentially fewer appropriate disability organisations in regional areas to access.
- Incorporating some of the performance elements as guidance only allows:
 - flexibility in content, delivery and implementation;
 - scalability, reducing the burden on smaller operators and providers to comply with regulation; and
 - promotion of best practice of co-design with the disability community.
- Operators and providers will incur costs to implement mandatory training requirements, including cost of lost hours worked when staff are required to attend mandatory training.
 - However, data obtained from the cost-benefit analysis indicated that additional staff to deliver training was not expected to be required. That is, the training would be delivered with existing training resources and any costs associated would be due to lost hours worked for existing staff to attend training.

The cost-benefit analysis for reforms to staff training and communication returned a **Benefit-Cost Ratio of 3.0** (detail below).

Impacted Parties

Individuals

Improving the quality of training will lead to better accessibility outcomes, improved confidence and will help to provide certainty of travel for people with disability. People with disability will also benefit from increased safety while using

public transport. Improving quality of staff training will help reduce barriers for people with disability to use public transport leading to increased participation in work and community life. Building capacity of operational staff will help get the balance right between providing assistance for people with disability while also allowing for independent travel.

Operators and Providers

Operators and providers will bear the cost of implementing any training programs that are not currently in place or amending existing training programs to meet new regulatory requirements. There will be a larger burden on smaller operators and providers to comply with regulation, due their comparatively lower resources.

The CBA costed the regulatory option based on an assumption that no operators and providers would currently be compliant. However, consultation indicated that many operators and providers do provide disability awareness training, and would in fact already comply with the proposed regulatory requirements and would not need to update their training programs. If this applies across the board, this would result in a lower regulatory impact than that found through the CBA, as staff training requirements would be reduced.

Operators and providers will need to engage with the disability community in the design of training content and programs. They will also need to review and update training programs periodically to ensure they are fit-for-purpose.

Indicative Regulatory Impacts per year

Regulatory Benefits

The Monash University Public Transport Amenity Values report suggests that improving staff training has the potential to increase amenity for public transport users by:

- 0.75 in-vehicle time (IVT) minutes for buses and coaches
- 0.09 IVT minutes for trams / light rail
- 2.17 IVT minutes for trains and ferries
- 0.51 IVT minutes for taxis
- 0.57 IVT minutes for airports
- 1.60 IVT minutes for airlines.

The amenity benefit for this reform is associated with the presence of staff and the result of additional training is assumed to add 10 per cent to the full amenity benefit. Benefits have been applied to an assumed 30 per cent of users across bus and tram / light rail and 60 per cent across train and ferry modes in recognition of the fact that some states and territories already provide compliant training and that many public transport users do not interact with staff in these modes (in which case these users will not experience the benefit uplift in additional staff training).

Given the Benefit Cost Ratio (BCR) is greater than 1.0, regulatory reform in this area is estimated to result in a net benefit relative to the status quo. As costs for operators and providers are likely to be absorbed within current training funding commitments, benefits will be gained through improved quality of training provided.

Regulatory Costs

The table below outlines the impact of implementing the regulatory option for staff training.

Table 10: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$14.2	\$0	\$0	\$14.2
Total over 10 years, by sector	\$142.5	\$0	\$0	\$142.5

**The costs in Table 10 above have been determined based on the assumption this regulatory change would be applied retrospectively over a compliance schedule (a decision to be made by Transport Ministers in 2022). Costs may be reduced*

if a longer schedule is applied to these requirements or avoided entirely if these requirements are not applied retrospectively.

The regulatory burden calculation and CBA assumed that staff training will be provided annually and on an ongoing basis and be delivered either face-to-face or virtually.

The transport operators and providers who provided data into the CBA indicated they did not expect they would require additional staff to deliver the training. That is, any costs incurred would be due to lost hours worked for existing staff to attend training.

Staff training costs and volume inputs were obtained from the CBA surveys and the responses extrapolated for missing responses. The number of customer-facing staff has been assumed to grow in line with passenger growth, which is assumed to reflect overall population growth. As such, training costs are therefore expected to increase proportionally.

The following number of average customer-facing staff per conveyance were used:

- Bus – 1.73
- Coach – 1.32
- Tram/Light Rail – 1.32
- Train – 1.32
- Ferry – 9.0
- Taxi – 1.32
- Airplane – 3.36.

The total number of conveyances are at [Appendix A](#).

Survey responses indicated an average staff member wage rate of \$40 per hour and an average annual training commitment per customer-facing staff of 5.25 hours (refer to [Appendix B](#)). This was applied across all modes of public transport.

The average annual regulatory cost of \$15.2 million reflects the current annual training commitment of operators and providers who already provide staff training. The regulatory option should not impose any additional training hours required for those organisations who already provide training. As such, the regulatory impacts incurred are likely to be a cost already committed and any additional costs should be limited.

This was supported by responses to Consultation RIS whereby a majority of submissions from operators and providers indicated that they already provide some form of disability awareness training through a number of mechanisms. Further, many indicated that they would incur little to no cost impact outside of what they currently provide as long as the reforms did not mandate changes to training content or delivery requirements (such as requirements for training to be delivered or co-presented with people with disability).

Operators and providers who do not provide training programs would likely incur the full regulatory impact²².

5.1.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option for the implementation of staff training and communication is **the regulatory option**.

There was overwhelming acknowledgement across all groups that staff training is essential in improving the public transport experience of people with disability. All responses from the disability community supported the regulatory

²² Data on the number of operators and providers who do not provide training programs was not obtained.

option highlighting staff training as a critical factor in reducing discrimination against people with disability. A majority of responses from operators and providers also supported regulatory change with some advocating for minor concessions regarding the prescriptive nature of the regulatory elements.

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability and there are benefits to be gained through improved quality of training as reflected in the impact analysis and the resulting **Benefit-Cost Ratio of 3.0**.

Regulating staff training requirements would also safe-guard best practice and prevent any future dis-benefit. That is, any changes by operators and providers that could result in decreased accessibility in the future is prevented by implementation of the reform.

This option has an estimated net regulatory cost of **\$142.5 million over 10 years**. However, as outlined above, this is effectively a 'worst case' regulatory cost scenario, as it incorporates training costs that are already being expended. It can be assumed that for the many operators and providers who already provide staff training, **these costs are largely already committed and the actual impact would likely be less**.

Case Study – Cheng is a railway platform attendant. Cheng sees a man with a mobility aid looking for assistance.

Status Quo – Cheng’s experience today

A train arrived into the station where Cheng works as a railway platform attendant. Cheng has noticed a man in a wheelchair moving towards the train looking around. Cheng watches and waits for the man to ask for assistance to board the train, but he doesn't and the man misses the train. Cheng has not received any disability awareness training from her employer.

Preferred option - Cheng’s experience under the proposed regulations

A train arrives into the station and Cheng notices a man in a wheelchair moving towards the train looking around. Cheng approaches the man and asks if he needs assistance. The man is grateful and Cheng assists the man to an accessible door with a boarding ramp to board the train.

When Cheng started her job as a railway platform attendant she was provided with disability awareness training to support her in her interactions with the public. Cheng feels confident to provide information and support to people with disability in a positive and inclusive way and to help people with mobility requirements safely to board and alight from the train.

5.1.5 Implementation Options

As noted in Section 5 the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

The proposed changes to staff training and communication will represent a new requirement in the Transport Standards. The assumption for the CBA was that public transport operators and providers would be 100 per cent compliant within five years.

5.2 Mobility Aid Safety

5.2.1 Problem and options

Submissions to reviews of the Transport Standards have identified a need for further clarity and guidance for both operators and customers on the safety measures required by the Transport Standards for customers travelling in mobility aids whilst in transit. This issue is particularly relevant for buses, trams and light rail as passengers in these conveyances are sometimes subject to significant displacement forces during starts, stops and turns, which are a product of the dynamics of the street road environment. At times, mobility aids will unexpectedly slide or tip out of allocated spaces and into the aisle when these forces are suddenly experienced.

People with disability have indicated that they prefer solutions that allow them to travel independently and provide freedom of choice. The Transport Standards section 9.11 requires that 'an allocated space must contain movement of a mobility aid towards the front or sides of a conveyance'.

Australian Standards for both for active and passive restraints have been published:

- AS/NZS 10542.1:2015, Technical systems and aids for people with disability — wheelchair tie down and occupant-restraint systems Part 1: Requirements and test methods for all systems.
- AS/NZS ISO 10865.1:2015, Wheelchair containment and occupant retention systems for accessible transport vehicles designed for use by both sitting and standing passengers — systems for rearward-facing wheelchair-seated passengers.

However, neither of these Australian Standards are referenced in the current Transport Standards.

Active restraining systems are required in wheelchair accessible taxis (WATs), coaches and other conveyances in which all passengers are required to wear seat or safety belts. Bus, tram and light rail passengers are not required to wear seat or safety belts. Therefore, the use of any active restraint system (if provided) is at the passenger's discretion.

The provision of passive containment systems is the minimum requirement applicable under the Transport Standards to the allocated spaces of buses, trams and light rail conveyances, although operators are able to install active restraining systems at their discretion.

Table 11: Summary of Options for Mobility Aid Safety

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Additional guidance would be included in the Transport Standards Guidelines and The Whole Journey Guide concerning mobility aids on conveyances.
Regulatory	No regulatory was presented for consultation as research is currently being conducted into this area. Regulatory options will be considered in Stage 2 of the reform process.

5.2.2 Consultation Findings

Submissions from all stakeholders, as well as survey responses received considered this topic to be a key issue of concern for the Transport Standards. There was strong support for further guidance to be included in the Transport Standards Guidelines and The Whole Journey Guide across stakeholders. The disability community consistently indicated in submissions that they felt unsafe in allocated spaces when using a mobility aid. Others reported accidents involving mobility aids falling on them or their assistance animals. One person reported their guide dog's leg was broken as a result of a mobility aid falling on it during transit. Such a situation causes stress and anxiety for not only the people involved in the accident, but all passengers and the driver. Submissions from the disability section reported that the safety of allocated spaces for all people reliant on them, such as parents with prams, people with assistance animals and people using mobility aids, should be improved.

The incidence of people with disabilities including those with mobility devices sliding, tipping, falling or otherwise having unsafe experiences is vastly under-reported

All Aboard

Submissions from stakeholders across all sectors emphasised the importance of mobility aid safety solutions enabling independent travel. Submissions from the disability sector, government and industry stated that mobility aid safety solutions should be entirely operable by the user and not reliant on any staff members. Individuals who responded to the surveys or made submissions typically reported they would use active restraints if they were available, but were strongly opposed to active restraints being mandatory in conveyances where other passengers do not have to wear safety belts. Submissions from governments also supported this position.

Any mobility aid safety system should be to the greatest amount practicable, self-operated by the passenger

National Inclusive Transport Advocacy Network

Submissions from both the disability community and governments supported investigating possible regulatory reforms in the future. Governments noted they are awaiting further research into this issue currently being conducted. The disability community cited concerns with the current wording of the requirements for passive restraints and argued it should be amended in the future to enhance safety.

The wording of the DSAPT 9.11 requirement has long been of concern because of the use of the word 'or' instead of 'and'. Transport operators and providers have taken this to mean that it is compliant to restrict movement either to the sides or to the front, but not both

All Aboard

Submissions from government predominately supported the non-regulatory option and argued it would assist and encourage best practice in this space, while also allowing for innovative solutions. Support for the non-regulatory option was not unanimous from government, one submission argued providing guidance would hinder the development of innovative solutions which do not require direct assistance.

Providing guidance would be beneficial to conveyance designers, operators, service providers and people with disability that utilise mobility aids

NSW Government

Submissions from industry aligned with the views of other stakeholders. In particular, they stressed that active restraints should not be mandatory and, in the case of buses and trams, should not rely on the driver or other staff member to deploy. Some submissions from industry were concerned with the focus on buses, light rail and trams rather than other conveyances such as ferries and taxis.

There are a number of barriers in relation to requiring bus drivers to assist customers in utilising active restraints. Potential driver assault, bus rollaway, emergency evacuation, dwell time, discrimination, potential conflict and intrusion of personal space

Bus Industry Confederation

5.2.3 Impact Analysis

Status Quo Option

No change is made to the Transport Standards or the Transport Standards Guidelines. Section 9.11 of the Transport Standards outlines requirements regarding movement of a mobility aid in allocated space. The Transport Standards Guidelines provide further advice regarding restraints in Division 9.2.

Eliminating Discrimination

The status quo will not address discriminatory outcomes that are currently occurring. People with disability will continue to experience issues outlined in the problem statement.

Key Impacts

- Operators will not be encouraged to improve the safety of mobility aids on their conveyances, this may result in people with disability continuing to feel or experience unsafe outcomes if operators do not take steps to increase safety.
- Operators and providers will need to develop their own guidance and policies for mobility aid safety based on the current requirements if they wish to increase the safety of mobility aids on their conveyances. This may result in additional burden on operators and providers.
- Operators and providers may continue to incur the cost of accidents or injuries on their conveyances.

Impacted Parties

Individuals

Mobility aid users or others who use allocated spaces may continue not to use conveyances that do not have adequate passive or active restraints to ensure mobility aids to not slip or fall during transit, preventing them from accessing public transport. Mobility aid users may seek to avoid conveyances which are not adequately safe, increasing trip times.

Operators and Providers

Operators and providers will be reliant on their own guidance and policies to ensure their conveyances are safe for users of allocated spaces and may continue to receive complaints about safety for mobility aid users on allocated spaces, or may be required to adopt policies that prevent less-stable mobility aids from entering certain conveyances without adequate safety systems in place.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

Guidance would be included in The Whole Journey Guide concerning mobility aids on conveyances. No changes to either the Transport Standards or Transport Standards Guidelines would be made. This guidance would outline the following considerations for designers with regard to improving the safety of mobility aid users travelling on a conveyance, in particular, on buses, trams and light rail where they are subject to greater forward and lateral movements.

- Mobility aids travelling in buses and trams experience different forces than other transport modes. This is due to the dynamic environment that these vehicles operate in and the risks associated with those environments (for example, travelling on roadways in mixed traffic).
- The dynamic forces experienced in these vehicles can result in users of mobility aids tipping or sliding out of allocated spaces. Some causes of these forces are unavoidable. For example, sudden emergency braking to avoid a collision for buses and trams or the requirement to turn tight corners in a suburban street for buses. These actions can cause forward or side movements respectively and are distinct to each scenario.
- Operators and providers should consider measures to minimise or contain the movement of mobility aids in allocated spaces when in transit. The type of forces and movements to be contained will be different for each mode and should be considered when developing solutions to contain movement. Containment of movement may be done by installing passive or active restraining systems.
- An active restraint system anchors a mobility aid into an allocated space. Anchorage belts are an example of active restraints. Regulations that normally require passengers to wear safety belts apply equally to all passengers. This means that operators of services on which safety belts are mandatory must provide restraints for use by mobility aid users. Similarly, passengers need to use safety belts if they are compulsory.
- A passive restraint system contains movement of a mobility aid within an allocated space. As Section 9.7 of the Transport Standards Guideline provides, a vertical surface that restricts the movement of a mobility aid is an example of a passive restraint. Where a passive or active system is offered on a service and it is not a requirement for all other passengers to wear safety belts, the use of these systems is at the discretion of the

user. It should also be noted that there may be technical constraints in adopting an active system as there is not a solution that may fit the needs of all users and device types.

- Operationally, the use of any active restraining device may require that a customer is able to independently use the system without the assistance of staff. This is due to occupational health and safety issues for staff and impacts to service running that may result from requiring direct assistance in the use of these systems. Consideration should also include the potential development of restraint solutions that do not require intervention from the driver, passengers or the passenger's carer or companion. Again, this outcome may not address the needs and expectations of all users.
- When considering solutions to contain movement in allocated spaces, operators and service providers may look to adopt requirements from Australian Standards such as AS/NZS ISO 10865.1:2015.
- AS/NZS ISO 10865.1:2015 Wheelchair containment and occupant retention systems for accessible transport vehicles designed for use by both sitting and standing passengers - Systems for rearward-facing wheelchair-seated passengers.
- It should be noted that AS/NZS ISO 10865.1:2015 requires users to face rearward, which is not preferred by some users. However, the requirement to face rearward offers better safety in being able to contain forward movement. Further, some trams and light rail vehicles can travel in both directions making the application of the requirement to face rearward difficult to achieve in all operational circumstances. In circumstances where compliance with AS/NZS ISO 10865.1:2015 is not achievable or preferred by users, the development of an equivalent access solution determined through a co-design process is encouraged.

Guidance would also encourage operators and providers to provide information to the public on the provision of mobility restraint safety elements installed on conveyances throughout their networks. This information should link in with broader publication of accessibility features to assist whole-of-journey planning.

Eliminating Discrimination

The non-regulatory approach will assist operators and providers to improve the safety of mobility aids in transit and reduce discriminatory outcomes as outlined in the problem statement. The guidance for active and passive restraints may help to ensure people who use mobility aids can take public transport journeys safely.

People with disability will have greater confidence they can access public transport without risking serious injury.

Key Impacts

- Expanding The Whole Journey Guide will provide practical guidance to operators and designers in selecting a containment system for a service and how it may be applied through operations.
- As the suggested access provisions would be promoted as guidance, any extra costs imposed by meeting the outcomes would be at the discretion of the operator or provider.
- Guidance may lead to more consistent application of best practice in relation to containment systems on public transport for transport providers and operators.
- Any compliance with the guidance is at the discretion of the operator and designer of the public transport service.
- Any upgrades conducted as a result of this guidance would be likely to enhance the safety of mobility aids in transit, however no consistency or safety outcomes for people with disability can be guaranteed.
- The discretionary use of any system will be reliant on the individual's choice to utilise the system available. As a result, it cannot be guaranteed that installation of a system will address and minimise the risk of persons being contained in transit.
- For public transport providers and operators, there may be more investigation and up-front costs when attempting to implement the guidance. As this option is advisory guidance, the cost to upgrade any existing vehicles will be dependent on the technical constraints of each conveyance/vehicle type. This may limit the adoption of a particular system and would be at the discretion of providers and operators.
- Where there are significant constraints, operators may choose not to make any changes until vehicles are replaced and therefore the cost associated would be the same as the status quo.
- There may be uncertainty as to whether a conveyance is safe for people with disability if upgrades are not rolled out consistently across a fleet of conveyances.

- Other travellers may feel safer traveling alongside mobility aid users if they are more secured and less likely to tip, slide or fall during transit.

Impacted Parties

Individuals

Members of the public would be reassured that conveyances are better suited for travel. Mobility aid users other people who use the seating in allocated spaces will feel reassured allocated spaces are safe if incidences of mobility aid falls, tips and wobbles decrease and allocated spaces are retrofitted with new safety features. People may decide to use conveyances they would otherwise avoid because of any new safety measures, expanding access to public transport. Passengers around allocated spaces may also feel safer as a result of any new safety features to protect from mobility aids sliding, tipping or falling.

Operators and Providers

Operators and providers may need to upgrade or retrofit existing conveyances, or procure vehicles with more safety features to meet the guidance provided. Those who adopt the provided guidance will be assisted to increase the safety of their conveyances, which may result in fewer reported and unreported accidents on conveyances.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

5.2.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option for the implementation of mobility aid safety is **the non-regulatory option**.

Stakeholders identified mobility aid safety a priority area of reform. Industry, government and the disability community overwhelmingly supported the guidance provided, saying it would assist operators and providers to achieve best practice in relation to the safety of mobility aids on-board conveyances.

There is **no estimated regulatory cost for the preferred option**.

Case study - Kerry is a mobility aid user who takes the bus to work every day. Road works have recently commenced on her bus route.

Status Quo – Kerry’s experience today

Kerry boards the bus and moves to the allocated space. The allocated space on the bus does not have any safety features to minimise movement in the space. Road works have commenced on the bus route to Kerry’s work. The road surface causes the bus trip to get bumpy and the bus driver brakes suddenly throwing Kerry forward. Kerry feels nervous that she might fall out of her mobility aid and she holds on tightly to the closest grab rail beside her to keep the mobility aid from falling. Kerry feels unsafe on the bus making her reluctant to use the bus when she does not have to.

Preferred option – Kerry’s experience if the guidance is enacted

Kerry boards the bus and moves to the allocated space like usual. Kerry sees the bus has new safety features designed to protect mobility aid users. When the bus trip to work gets bumpy and the bus driver brakes suddenly due to the road works Kerry feels secure, because among the safety options now available she has elected to use a restraining belt to secure her mobility aid and has the additional security of an ‘ironing board’ barrier to prevent being thrown forward. Kerry feels safe and confident to travel on the bus to work now.

5.3 Priority Seating

5.3.1 Problem and options

Section 31.1 of the Transport Standards requires public transport operators and providers to provide at least two priority seats on conveyances for 'passengers with disabilities and other groups in need of special assistance'.

The size of the cohort in need of priority assistance is substantial and is increasing as the population ages. In 2018, there were 4.4 million Australians with disability (17.7 per cent of the total population), of which, 76.8 per cent reported a physical disorder as their main condition (the condition causing them the most problems)²³. Many in the public transport industry and the disability community have raised that the current requirement for a minimum of two priority seats is inadequate, and that the provision of a sufficient proportion of priority seating will enable greater access to public transport for those in need.

Additionally, the Transport Standards do not provide requirements or information for identifying and locating priority seats on a conveyance. The Transport Standards are also silent on requirements for the accommodation of an assistance animal on an unbooked service. People with disability will be disadvantaged and may face discrimination if they are unable to safely locate and access priority seating.

Table 12: Summary of Options for Priority Seating

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Additional guidance and expanded informative material would be included in The Whole Journey Guide to provide advice on good practice designs for priority seats.
Regulatory	Mandatory prescriptive elements would be included in the Transport Standards which identifies the number and location of priority seats, identification of priority seats and requirements for the accommodation of assistance animals. Performance-based and advisory elements would be incorporated and expanded upon in the Transport Standards Guidelines.

5.3.2 Consultation Findings

Responses to the Consultation RIS identified priority seating as an important component of an accessible public transport journey. While the majority of responses from individuals and disability organisations supported the regulatory amendments in regards to location and identification, there were mixed views from public transport operators and providers on mandating some of these requirements.

The regulatory option put forward in the Consultation RIS provided four sub-options for calculating the number of priority seats in a conveyance. A majority of submissions across all groups indicated a specific preference for one of the sub-options put forward. All of the sub-options stipulate the minimum provision for conveyances must be 2 priority seats.

Sub-option 1

For every 20 passengers or part thereof, one priority seat must be provided. Passenger capacity includes both seated and standing passengers.

Sub- option 2

Not less than five per cent of the passenger capacity must be provided as priority seating. Passenger capacity includes both seated and standing passengers.

²³ Australian Bureau of Statistics, Disability and Carers Australia Summary Findings
<https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release>,
 accessed on 20 July 2021

Sub-option 3

For every 20 seats or part thereof, one priority seat must be provided to ensure that eligible passengers can access a priority seat without difficulty.

Sub-option 4

A minimum number of priority seats must be provided to ensure that eligible passengers can access a priority seat without difficulty.

Submissions were largely silent on the specific requirements for assistance animals, however where raised, responses across the board were largely supportive of mandating requirements that promote the safety of assistance animals and their handlers. Assistance animal safety on buses is a significant concern for handlers and several responses provided examples of serious injury to assistance dogs (and distress to their handlers) on buses and trains. These responses noted the provision of space underneath priority seating for assistance animals is one way to improve design and safety. **John, a participant in one of the online workshops**, reflected on his own experiences travelling with his assistance dog:

One of the most sad experiences I had was having my dog sitting up against the wall of the train, his paws were out the front because he was a full adult dog, and then somebody, completely accidentally, came in in a wheelchair and rolled over both of his legs. That was, of course, very, very upsetting for me and for the person because they were a dog lover as well.

John further explained the extent a serious injury to an assistance animal can have and the impact on their handler:

*...sadly the dog was very badly injured and had to be put down. You can imagine the grief of the handler to be on the bus and **literally have their independence taken away from them** because there was no space under the seat and the dog was that badly injured that it passed away.*

All responses from the disability community identified the current requirements for priority seating as inadequate and supported regulatory change to address the issue. There was also broad support across these responses for regulatory changes that would strengthen requirements around location and identification of priority seating which would promote consistency across jurisdictions and modes of transport.

Of the disability community responses that identified a preferred sub-option for the calculation of minimum required priority seating on a conveyance, all but one response identified sub-option 1 as their preferred option. Many responses noted the difficulties in being able to access a priority seat when needed.

Buses, trains, ferries, light rail – you can never seem to get a priority seat.

Sarah, online workshop participant

Submissions from the disability community noted that providing a minimum of four (rather than two) priority seats would still be inadequate to accommodate growing demand. Submissions noted that the sub-options which calculate for one in 20, or part thereof, may still be inadequate as this only provides a minimum five per cent ratio of priority seating. Responses argued that calculation of seats based on passenger capacity was seen as critical as it would provide the greatest number of priority seats to reflect growing demand.

A key concern raised in disability submissions was that identification should not be based on colour and luminance contrast alone as this would not be sufficient. Identification also needs to be supported by appropriate braille and tactile signage, signage provided in multiple formats and should be consistent across all public transport networks.

While not in scope of the proposed regulatory amendments, there was a broad theme across disability community responses which supported mandating requirements for providing penalties for passengers who fail to vacate a priority seat. This was supported by concerns that public transport staff need to be equipped to deal with these circumstances, highlighting how critical appropriate staff training and awareness is in relation to priority seating.

There were also contrasting views across the disability community on introducing guidance for identification of passengers eligible for priority seats. A majority of submissions did not support the use of identification cards for passengers with disability and noted that consultation with the disability community was critical prior to introducing any

requirements or guidance around identification. While some individuals indicated they would wear an identification badge, they noted there is a risk of being excluded from priority seating if you are not wearing identification.

All submissions received from public transport operators and providers indicated they already provide more than the minimum requirement of two priority seats and in most cases, already provide colour contrasted upholstery to differentiate priority seating. In relation to proposed regulatory change regarding location of priority seating, a common theme was that these location factors are already something that is considered and adhered to where possible. In addition, a number of responses indicated that a majority of operators and providers provide some form of identification and instruction for passengers by way of decals and other visual signage. Submissions noted that other identification elements such as luminance contrast and braille and tactile signage is not common practice.

In response to the proposed introduction of raised symbols, tactile text and braille equivalent for identification of priority seating, one government submission noted that braille requirements should not be mandated given many people with vision impairment do not read braille, however no statistics on braille literacy were provided. Vision Australia strongly supported the introduction of braille and tactile elements to assist passengers who are blind or have low vision to identify priority seating.

Clients who are blind can find it difficult to identify vacant priority seating in the absence of braille and tactile signage, so we strongly support the inclusion of signage requirements in the Standards.

Vision Australia

For these reasons, the majority of responses preferred the non-regulatory or status quo option for location and identification requirements as they do not see a need for regulatory change in these areas. Further, the majority welcomed additional guidance in The Whole Journey Guide as this would provide sufficient information and clarity around best practice while still allowing flexibility in implementation and design.

In relation to the regulatory sub-option for calculating the number of required priority seats on a conveyance, the majority of transport operators and providers supported either sub-option 3 or 4 as these calculations provide the most certainty and clarity in relation to prescribed number of priority seats required. A number of responses cited difficulty in calculating the number of priority seats based on conveyance capacity, such as differences in interpretations and calculations of capacity (with some operators calculating capacity based on weight and others based on sitting and standing passenger capacity).

5.3.3 Impact Analysis

Status Quo Option

No change is made to the current Transport Standards text and no new guidance issued. Section 31.1 would remain unchanged, requiring that 'operators must designate at least two of the seats provided on their unbooked conveyances as priority seating for passengers with disabilities and other groups in special need of assistance (for example, the aging)'.

Eliminating Discrimination

The status quo will not address discriminatory outcomes where the ability of people with disability to use public transport is limited because they are unable to access priority seating for them to undertake travel.

Key Impacts

- This option would not involve any new costs to operators and providers.
- The option would not introduce additional regulatory burden or associated administrative costs.
- There would be a lost opportunity to better identify priority seats and to ensure assistance animals traveling with their handlers are accommodated.

Impacted Parties

Individuals

People with disability and public transport users may experience issues with accessing, locating and identifying priority seating which could act as a barrier to travel on public transport.

People traveling with assistance animals will not be assured that priority seating will provide a safe and adequate space for their assistance animal.

Operators and Providers

Operators and providers will not incur additional costs. The operators and providers that are already providing more than a minimum of two priority seats per conveyance are likely to continue to do so based on feedback from stakeholders.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

Additional guidance and expanded informative material would be included in The Whole Journey Guide to provide advice on good practice designs for priority seats.

This option would see additional guidance included in The Whole Journey Guide to provide advice on:

- number of priority seats per conveyance
- location of priority seats in a conveyance
- identification of priority seats
- penalties for failing to vacate priority seats on request
- use of folding seats in allocated spaces as priority seats
- accommodation of assistance animals.

Following feedback through the Consultation RIS, the features for this option have been refined. The significant deviation from the Consultation RIS is the removal of guidance regarding identification of passengers eligible for priority seats.

This is because a majority of submissions from the disability community did not support the use of identification cards for passengers with disability and noted that consultation with the disability community was critical prior to introducing any requirements or guidance around identification. While some individuals indicated they would wear an identification badge, they noted there is a risk of being excluded from priority seating if you are not wearing identification.

Eliminating Discrimination

To the extent that guidance is followed, discrimination against people with disability will be reduced by ensuring there is an appropriate number of priority seats available for those who need it and there are appropriate visual and tactile indicators to allow people with varying disabilities to identify priority seating. Further, passengers traveling with assistance animals will be afforded the same level of safety and access to travel as passengers traveling without an assistance animal.

The level of reduction of discrimination is scalable and cannot be guaranteed due to the discretionary nature of the option.

Key Impacts

- Strengthen the expectations for transport operators and providers regarding the number, location and identification of priority seating.
- May lead to an increased number of priority seating provided on conveyances.

- Where possible, priority seating will be located in an accessible location and will be appropriately identified and distinguished from non-priority seating. However, consistency on the location and identification elements may not be achieved.
 - For example, some conveyances may use different signage or colours to differentiate priority seating which could be confusing for passengers.
- Due to the discretionary nature of this option, it does not provide certainty that the number of priority seating will be increased across transport modes nor that there will be sufficient space to accommodate an assistance animal.
- To the extent operators and providers implement guidance, they will incur installation costs of upholstery, signs, symbols, tactile text and braille equivalent where these elements are not already adhered to.
- Costs will only be incurred, and benefits achieved, to the level that operators and providers implement guidance. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Impacted Parties

Individuals

To the extent that guidance is adopted, individuals may benefit from greater access to priority seating if the number of priority seating is increased. Passengers who are blind or have low vision will be afforded greater confidence to locate priority seating to the extent that instructional signs, symbols (including tactile text and braille equivalent) and luminance contrast are used. A lack of consistency across public transport modes and jurisdictions may hinder the confidence of people with disability to travel on public transport.

Operators and Providers

Operators and providers will bear the cost of implementation, however this cost can be mitigated and managed on an individual basis due to the discretionary nature of this option. Improved guidance will provide operators and providers in depth information to incorporate accessibility needs for people with disability in relation to the design, identification and implementation of priority seating on conveyances. Operators and providers will also benefit from the flexibility of the guidance.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

The Transport Standards will be amended to provide a balance of prescriptive and performance-based requirements for priority seats in conveyances.

The regulatory option would specify the following specific amendments to the Transport Standards:

1. Number of priority seats per conveyance
 - Priority seating for passengers with disabilities and other people benefitting from priority seating, such as seniors and pregnant women, must be provided using the following ratio:
 - For every 20 seats or part thereof, one priority seat must be provided to ensure that eligible passengers can access a priority seat without difficulty. A minimum of two priority seats must be provided.
2. Location of priority seats in a conveyance
 - Priority seating must be clustered as close as possible to either:
 - Entrance doors and accessible facilities; or
 - The driver or a consistently staffed location

3. Identification of priority seats

- Priority seating must be identified by signs and have a minimum of 30 per cent colour and luminance contrast with the upholstery of other seating in the conveyance.
- Signage for priority seating must:
 - Be located immediately adjacent or as close as possible to the priority seating;
 - Have 30 per cent colour and luminance contrast with background surface; and
 - Instruct passengers to vacate an identified priority seat if a passenger with a disability requires it.

4. Accommodation of assistance animals

- Assistance animals must always travel with their handlers. A space underneath priority seats that is sufficient to accommodate assistance animals must therefore be available.

The mandatory performance based element for identification of seats has been amended to provide clarity that colour and luminance contrast is required for the upholstery only.

The Transport Standards Guidelines would be updated to reflect the Transport Standards amendments and include the following performance based advisory elements:

- Signage for priority seats should have raised symbols, tactile text and braille equivalent to assist people who are blind or have low vision.
- State regulators may choose to issue penalties to passengers who refuse to vacate priority seats on operators' request.
- Operators may only use folding seats for priority seating in allocated spaces if:
 - The folding seats do not disadvantage passengers using mobility aids who require the use of allocated spaces.
 - The minimum number of priority seats are provided as fixed seats elsewhere in the conveyance.

Following feedback through the Consultation RIS, the features for this option have been refined. Major deviations from the Consultation RIS are:

- Removal of the 'signage for priority seating must have raised symbols, tactile text and braille equivalent' element from the regulatory requirements and instead be included as guidance in the Transport Standards Guidelines.
- Removal of 'identification of passengers eligible for priority seats' element as guidance to be inserted into the Transport Standards Guidelines.

On the balance of feedback and analysis, it was considered that the requirements around raised symbols, tactile text and braille equivalent would be better placed in the Transport Standards Guidelines as best practice. The majority of responses from transport operators and providers did not support regulation in relation to any location or identification elements (including luminance contrast) and cited the requirements around braille and tactile signs would impose the greatest cost. Further, there are difficulties in finding a suitable location for braille and tactile signage so that it is close enough to the priority seating, is in a position that is legible for people who are blind or have low vision, and where reading the signs does not impact another seated passenger. Submissions from the disability community did support these requirements, but did not indicate that these requirements were necessary to eliminate discrimination.

As outlined in the non-regulatory option above, the removal of guidance regarding identification of passengers eligible for priority seats is based on the lack of support across the disability community. Further, any introduction of guidance or mandatory requirements around identification, would require broad consultation with the disability community.

Eliminating Discrimination

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability.

Mandating requirements will provide certainty that the minimum number of priority seating required on conveyances will increase and ensure there is adequate assistance provided for passengers.

The requirements to provide appropriate identification elements such as luminance contrast and adequate signage will reduce discrimination by ensuring people with varying disabilities are able to identify priority seating.

Discrimination against people traveling with assistance animals will be reduced by ensuring these passengers are afforded the same level of accessibility and safety of travel as passengers traveling without an assistance animal.

Key Impacts

- Increased number of priority seating on conveyances where operators and providers do not already adhere to minimum requirements.
- Improved identification of priority seating through clearer signage and luminance / colour contrast.
- Greater space and accommodation for assistance animals, potentially resulting in a loss of space elsewhere on the conveyance.
- Provides clarity for calculating the number of priority seating required on a conveyance. While calculating a ratio based on seating numbers is clearer and more consistent for operators and providers, it may not increase the overall number of priority seating for passengers.
 - If priority seating was calculated on the basis of passenger capacity, it may result in some priority seating being located further away from entrance doors, accessible facilities or upstairs. For example, on an articulated bus where passenger capacity is higher than standard buses, the required number of priority seating would be greater and may not all fit in easy, accessible locations.
- Installation costs for new upholstery to increase the number of priority seating, including any costs associated with measuring luminance contrast, will be incurred.
- Where adequate signage that adheres to the prescriptive elements is not currently installed, installation costs will be incurred.
- Where increased space under a priority seat is required to accommodate an assistance animal, retrofitting costs are likely to be significant. The magnitude of costs incurred will be dependent on implementation requirements.

The cost-benefit analysis for reforms to priority seating returned a **Benefit- Cost Ratio of 2.4** (detail below).

Impacted Parties

Individuals

Greater access to priority seating will be provided for those passengers who require it through increased volume of priority seating. People who use assistance animals will benefit from increased safety of travel for themselves and their assistance animals.

Improving consistency of location, clarity of signage and colour contrast of priority seating will assist passengers to safely and easily locate priority seating, improving overall confidence of travel for passengers. Passengers who are blind or have low vision will be assisted by luminance contrast requirements however might face some limitations if braille and tactile signage is not used.

Operators and Providers

Operators and providers will bear implementation and installation costs to adhere to the new requirements. Calculating the number of priority seats using a ratio based on seating numbers rather than passenger capacity will provide clarity for operators and providers regarding their minimum requirements.

As highlighted through submissions, the majority of public transport operators and providers already adhere to minimum two priority seat requirements, location requirements, and the proximity and instructional elements of priority seating signage where possible. This would mitigate any costs associated with regulating these requirements.

Indicative Regulatory Impacts per year

Regulatory Benefits

The Monash University Public Transport Amenity Values report suggests that improved provision of priority seating has the potential to increase amenity for public transport users by:

- 0.53 in-vehicle time (IVT) minutes for buses, coaches and trams / light rail
- 0.83 IVT minutes for trains and ferries.

The amenity benefit relates to seating as a whole and it is assumed that the addition of priority seats to comply with the reform would only add a three per cent amenity to the public. The proportion of users impacted by the change has been adjusted to reflect the existing compliance figures identified below.

Compliance with the proposed reform relating to priority seating is expected to result in a three per cent reduction in the number of incidents on conveyances because additional seating will ensure the cohorts that are more susceptible to incidents have access to priority seating. The safety benefit has also been scaled back to acknowledge the widespread existing compliance figures below.

Given the BCR is greater than 1.0, regulatory reform in this area is estimated to result in a net benefit relative to the status quo.

Regulatory Costs

The table below outlines the impact of implementing the regulatory option for priority seating.

Table 13: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$3.7 million	\$0	\$0	\$3.7 million
Total over five years, by sector*	\$18.6 million	\$0	\$0	\$18.6 million

*The costs in Table 13 above have been determined based on the assumption this regulatory change would be applied retrospectively over a compliance schedule (a decision to be made by Transport Ministers in 2022). The annual total by sector is the average cost per year over the implementation timeframe of five years. Costs may be reduced or avoided if a longer schedule is applied to these requirements or if these requirements are not applied retrospectively.

Responses to the CBA survey and Consultation RIS indicated that the incremental cost of a priority seat (as opposed to a standard seat) is relatively low due to the main difference being the different upholstery. Further, these responses indicated there would be no assumed incremental cost of a priority seat in ongoing maintenance as this would be the same as a non-priority seat and would be considered business as usual costs.

The number of conveyances for which priority seating would require installation was determined through the survey responses from jurisdictions, operators and providers. These survey responses informed the values utilised to determine the costs associated with changes to priority seating. The average compliance rates with the sub-option 3 (the proportion of conveyances that are currently meeting the requirements of one priority seat per 20 seats) were identified as being²⁴:

- Buses 98 per cent
- Coaches 100 per cent
- Tram/light rail 77 per cent
- Train 38 per cent

²⁴ These estimates reflect the average of those states and territories that provided responses to this question in their survey. These figures are illustrative only as some modes are based on limited survey responses.

- Ferry 100 per cent.

The total number of conveyances are at [Appendix A](#).

For modes where cost values were not provided, the cost of priority seating was assumed to be equivalent to the average cost reported for buses in the CBA survey. The average cost of installing priority seating (largely comprising a change to the upholstery of the seat) was obtained from survey responses received and ranged between \$520 (tram/light rail) and \$2,075 (bus and other modes) (refer to [Appendix B](#)).

These costs are based on the assumption of installing a new priority seat on a conveyance. If reconfiguration of a conveyance is required to provide additional space to accommodate an assistance animal, the associated cost is likely to be higher.

5.3.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option for priority seating is **the regulatory option**.

Consultation responses highlighted support for greater consistency and clarity of priority seating requirements and a majority supported regulatory change to calculate the minimum number of priority seating required on conveyances. The disability community overwhelmingly supported regulating elements relating to location, identification and accommodating assistance animals. The majority of operators and providers only supported improved guidance in these areas to support best practice as many already aim to adhere to these elements. The regulatory option has been amended to strike a balance between conflicting views as detailed above.

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability as reflected in the impact analysis and the resulting **Benefit-Cost Ratio of 2.4**.

This option has an estimated net regulatory cost of **\$18.6 million over five years**.

Case study - John has low vision and has a guide dog to help him move safely and confidently. John is catching a train to his new job and hasn't been on this line before.

Status Quo – John's experience today

When John enters the train, he is unsure where the priority seating is located. He struggles to identify the priority seating as he is unable to differentiate the colour of the priority seats from other seats. When John locates the priority seating in the carriage they are all full and he barely manages to sit down before the train departs. His guide dog has to lie in the aisle, creating a hazard for other passengers who could accidentally trip on John's dog. John feels concerned and worried throughout the journey. On his return trip, John decides to use the allocated space instead to keep his dog out of harm's way, but this reduces the space available for people with mobility aids and people with prams.

Preferred option – John's experience under the proposed regulations

John enters the train and is able to quickly move towards the priority seating, as the seats are located in a similar location on other trains he has used before. John is able to easily identify which seats are priority seats because they are colour and luminance contrasted with the standard seats and this train also contains additional seats for use. Due to the prominent sign instructing passengers to surrender priority seats to passengers with access needs, a fellow passenger gives up his seat to John and he is able to sit down before the train departs. John's guide dog has space to lay down under the priority seat, keeping his dog and other passengers safe. John feels safe and comfortable, increasing his confidence to use public transport, especially on routes he isn't familiar with.

5.3.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

For priority seating, the assumption for the CBA was that public transport operators and providers would be 100 per cent compliant within five years as per Schedule 1 Part 1.1 (Priority).

5.4 Allocated Spaces in Transit

5.4.1 Problem and options

Passengers who use mobility aids are dependent on the availability and accessibility of allocated spaces in public transport conveyances to undertake public transport journeys.

Allocated spaces are provided on the understanding that people with mobility aids have priority access to them. To ensure maximum access to mobility aid users, access paths, manoeuvring areas and allocated spaces are required to be as clear and functional as practicable.

Further clarity is also needed to ensure that operators provide signs and/or inform customers that allocated spaces are priority for people using mobility aids.

Some of the key issues include:

- The existing definition of ‘allocated space’ in the Transport Standards makes clear that the space is three-dimensional. Length and breadth are adequately dealt with, as are operator responsibilities where these cannot be achieved, but no mention is made of the vertical dimension, except for those prescribed for wheelchair accessible taxis. Without defining the vertical space, there are limitations to how the Transport Standards can provide for safe and functional use of an allocated space.
- In some instances, fold down seats, vertical stanchions and other fixtures intrude into the clear vertical space above the allocated space as marked on the conveyance or rail car floor. These intrusions effectively reduce the allocated space available. While these fixtures are validly located immediately adjacent to the allocated space, they should not intrude into its vertical space.
- Allocated spaces are not exclusively reserved for mobility aids. Rather, they are simply provided on the understanding that people who have a disability are given priority access to them.
- Compliant width access paths can become blocked by standing passengers and objects at peak times.

Table 14: Summary of Options for Allocated Spaces in Transit

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Additional guidance and expanded informative material would be included in The Whole Journey Guide to provide advice on good practice designs and performance requirements for access paths, manoeuvring spaces and allocated spaces.
Regulatory	Mandatory prescriptive and performance elements would be included in the Transport Standards which identifies requirements for access paths, manoeuvring spaces and allocated spaces, including specifying particular objects that are permitted to intrude into the vertical space.

5.4.2 Consultation Findings

Overall, allocated spaces in transit was a key priority reform area identified throughout all responses. While there was broad engagement on this issue, there were contrasting views from stakeholders on the scale of intrusions permitted into the allocated space.

The regulatory option put forward in the Consultation RIS provided 4 sub-options for the specified items that can intrude into the vertical space. The sub-options provide a gradual increase in the number and scope of specified items that can intrude into the vertical space. The majority of responses from all groups indicated a specific preference for one of the regulatory sub-options for limiting the objects permitted to intrude into the vertical space.

Sub-option 1

Allocated spaces grab rails, a signal for requesting the deployment of a boarding device, or overhead handrails and hand grips provided for the safety of standing passengers.

Sub-option 2

As per sub-option 1 with the inclusion of forward excursion barriers (ironing boards) complying with AS/NZS ISO 10865.1-2015.²⁵

Sub-option 3

As per sub option 2 with the inclusion of lateral excursion barriers²⁶ complying with AS/NZS ISO 10865.1-2015.

Sub-option 4

Any controls, grab rails, passive restraints or safety devices intended for use by any occupant of an allocated space, plus any safely located air-conditioning ducts or electrical conduits conforming to Australian Design Rules that do not restrict manoeuvring or carriage of a mobility device.

All responses from the disability community indicated a preference for regulatory change with a majority supporting sub-option 1, which allows for the least number of intrusions into the allocated space. Most responses cited personal experiences of dealing with blocked access paths and highlighted that obstacles in the access paths and allocated spaces on conveyances are a significant barrier to safe travel.

While sub-option 1 would not allow intrusion of ironing boards into the specified allocated space, it is not advocating that ironing boards should not be installed. Rather, installation of ironing boards should be done outside of the allocated space so that it does not impact the safety of a passenger using the allocated space. Investigation and consideration of restraints for allocated spaces is currently underway as part of the Stage 2 process of the reform.

Submissions from the disability community identified the benefits of regulating requirements around allocated spaces to provide consistency and should promote the best outcome for safety of people with disability. Obstacles pose a hazard for people with disability which is reflected by the strong support for sub-option 1.

Intrusions in the allocated spaces must be absolutely removed to provide surety of access to the disabled traveling public

National Inclusive Transport Advocacy Network

One survey respondent reflected on a common occurrence with blocked access paths and allocated spaces while traveling on trains:

I have not been able to board, or I have to stand in the doorway with my son in his wheelchair on trains

Anonymous, survey respondent

Another survey respondent reflected on the significance not being able to access the allocated space on a conveyance:

I've had the bus deny me entry and be told to wait for another bus to pick me up

There was a common theme from disability responses that any outcome other than sub-option 1 would reduce the surety of safe travel of people with disability and not meet the objectives of the Transport Standards. Queenslanders with Disability Network supported the inclusion of forward or lateral excursion barriers ('ironing boards') in the vertical space to allow for passive restraints on the aisle side of an allocated space.

²⁵ AS/NZS ISO 10865.1-2015 Wheelchair containment and occupant retention systems for accessible transport vehicles designed for use by both sitting and standing passengers — Part 1: Systems for rearward-facing wheelchair seated passengers

²⁶ AS/NZS ISO 10865.1:2015 (p.2) excursion barriers: structures or devices designed to prevent the wheelchair from tipping, rotating or sliding into the center aisle or vehicle wall during transport.

If the aisle side barrier was in place in buses it is highly likely that at least one death and many injuries resulting from wheelchairs tipping into the aisle would have been avoided

Queenslanders with Disability Network

Public transport operators and providers expressed a mix of opinions in support for either regulatory or non-regulatory reform, however all supported improving consistency of requirements. Most operators and providers indicated that they already, where possible, adhere to the performance based standards included in the regulatory option. Most advised that they provide access paths as clear as possible, cluster allocated spaces close together and towards accessible doors, and co-locate access paths, manoeuvring areas and allocated spaces as close together as possible.

From this feedback, it can be assumed that implementation of the performance based elements in the regulatory option would not have a significant cost or burden to operators and providers. Some responses noted that there are circumstances where objects such as ticketing machines are required and would intrude into the access path.

Government submissions raised concerns that the regulatory option would involve removing the current requirement in section 2.6(3) of the Transport Standards²⁷. This section effectively allows conveyances in operation before the Transport Standards came into effect to have a minimum width of 800mm rather than the standard requirement of 850mm. Governments expressed concerns that retrofitting this requirement would have significant costs.

There was a strong theme across responses from operators and providers that any regulatory amendments should not be applied retrospectively and should only apply to new assets as the cost to retrofit assets would be prohibitive.

There was strong support from operators and providers for sub-option 4 which provides the broadest scope for objects permitted to intrude into the allocated space. Responses argued it provides broad scope for future design solutions, innovation and flexibility and accommodates the greatest number of safety features.

There were also concerns raised by the Bus Industry Confederation in regards to complying with the AS/NZS ISO 10865.1 2015 for sub-option 2 and 3. Technical requirements of this standard may result in reducing the length of an allocated space whereby a vertical ironing board would intrude into the allocated space. While ironing boards are permitted to intrude into the allocated space under these options, it may not present an optimal outcome.

Responses from operators and providers that advocated for the non-regulatory option argued that guidance in The Whole Journey Guide would provide enough information for policy makers, planners, designers and operators to think beyond compliance and incorporate accessibility needs for people with disability.

5.4.3 Impact Analysis

Status Quo Option

No change is made to the current Transport Standards text and no new guidance issued. The Transport Standards requirements for access paths, manoeuvring spaces and allocated spaces in conveyances remain unchanged. While the current Transport Standards identifies an allocated space as a three dimensional space, they do not stipulate the vertical dimensions of the space.

Eliminating Discrimination

The status quo will not address discriminatory outcomes where the ability of people with disability to use public transport is limited because they are unable to access allocated spaces for them to undertake travel. People with disability will continue to experience the issues outlined in the problem statement.

²⁷ Transport Standards Section 2.6(3) Access Paths – conveyances: If the conveyance exists or is ordered before the commencement of this section, the minimum width may be reduced to 800mm at any doorway restriction.

Key Impacts

- As there are no changes, costs in terms of design, fit out and maintenance will remain unchanged.
- The option would not introduce additional regulatory burden or associated administrative costs.
- There would be a lost opportunity to better define the nature, design and performance requirements for allocated spaces on conveyances and the access paths and manoeuvring areas associated with them. Qualitatively, this may result in suboptimal outcomes in some conveyances and a lack of consistency between jurisdictions and projects.

Impacted Parties

Individuals

People with disability will continue to experience difficulties with accessing and utilising allocated spaces, including the access paths and manoeuvring areas. This may reduce the level of confidence of passengers to travel and may continue to act as a barrier to using public transport.

Operators and providers

Operators and providers will not incur additional costs. Operators and providers will not be provided clarity regarding dimensions of allocated spaces and how to ensure safety of travel for passengers who use mobility aids and require allocated spaces.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

Additional guidance and expanded informative material would be included in The Whole Journey Guide to provide advice on good practice designs and performance requirements for access paths, manoeuvring spaces and allocated spaces in conveyances.

This option would see additional guidance included in The Whole Journey Guide to provide advice on:

- Vertical dimensions of access paths, manoeuvring areas and allocated spaces (width and depth dimensions are already covered)
- Co-location of access paths, manoeuvring areas and allocated spaces
- Objects permitted to intrude into the vertical space
- Manoeuvring areas not to be compromised
- Informing other passengers of allocated space priority
- Use of allocated spaces for other purposes
- Continuous accessible journey
- Anticipating future demand.

The intended outcome is to enhance the current requirements in the Transport Standards to give clear, concise guidance on the accessibility and clearance requirements for access paths, manoeuvring areas and allocated spaces in conveyances.

Eliminating Discrimination

To the extent that guidance is followed, discrimination against people with disability will be reduced by ensuring passengers traveling with a mobility device are afforded the same level of accessibility and safety of travel as passengers traveling without a mobility device.

The level of reduction of discrimination is scalable and cannot be guaranteed due to the discretionary nature of the option.

Key Impacts

- Improving guidance in The Whole Journey Guide will provide greater clarity and context for performance requirements of the Transport Standards to ensure a continuous accessible journey.
- Strengthened expectations of transport operators and providers regarding allocated spaces, access paths and manoeuvring areas.
- To the extent that guidance is followed, accessibility for people using mobility devices will be improved.
- This option does not provide the certainty that operators and providers will adhere to the guidance and does not provide a level of consistency of the minimum standards for allocated spaces, access paths and manoeuvring areas across jurisdictions and public transport modes. The benefits will only be realised to the extent that guidance is implemented.
 - For example, operators and providers may calculate the vertical space differently meaning some conveyances will have more space free from intrusions than other conveyances.
- To the extent that guidance is adopted, design and installation costs will be incurred. If reconfiguration is required, that is if operators and providers are required to remove items currently in the vertical space, these retrofitting costs could be significant.
- There may be costs incurred if conveyances are taken off the network in order to retrofit to meet requirements set out in the guidance.
- Costs will only be incurred to the level that operators and providers implement the guidance. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.
 - For example, retrofitting may be limited to small changes such as repainting of the borders of allocated spaces or moving a hand rail. However, relocating ticketing systems would impose a greater financial impact. Costs would be comparative to the level and complexity of retrofit adopted.

Impacted Parties

Individuals

To the extent that guidance is adopted to meet the specified requirements, there will be increased public confidence in the provision of allocated spaces that meet the safety needs of users.

To the extent that guidance is followed, accessibility and safety will be improved for people who have mobility impairments that travel on public transport

As consistency and certainty of implementation of guidance as minimum requirements cannot be guaranteed, people with disability may still experience a lack of confidence around their ability to safely access allocated spaces on transit and may continue to act as a barrier for people to use public transport.

Operators and Providers

To the extent that guidance is adopted, operators and providers will bear the installation costs.

Improved guidance will provide operators and providers in depth information to incorporate accessibility needs for people with disability in relation to the design and implementation of access paths, manoeuvring areas and allocated spaces on conveyances.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

The Transport Standards are amended to provide a balance of mandatory prescriptive and performance requirements for access paths, manoeuvring areas and allocated spaces in conveyances.

The regulatory option would specify the following specific amendments to the Transport Standards:

1. Vertical dimensions of an access paths, manoeuvring areas and allocated spaces
 - Access paths, manoeuvring areas and allocated spaces in conveyances are three-dimensional spaces and must have a vertical dimension that extends unobstructed for at least 1500 mm above the floor or deck.
2. Access path 'swept path' dimensions
 - The access path connecting the accessible entrance to the accessible features of the conveyance, and connecting those accessible features, must be maintained as an 850 mm wide 'swept path'.
 - This 'swept path' may be relaxed to 750 mm between floor level and a height of 300 mm between the wheel arches of a low floor bus. The front wheel arches of the bus are the area forward and rearward of the axle that contains the front road wheels plus any supporting chassis structure.
3. Objects permitted to intrude into the vertical space
 - Objects and fixtures must not protrude into the three-dimensional allocated space, manoeuvring area or access path, except for:
 - Allocated space grab rails, a signal for requesting the deployment of a boarding device, overhead handrails and hand grips provided for the safety of standing passengers, or forward excursion barriers (ironing boards) and lateral excursion barriers²⁸ complying with the safety elements of AS/NZS ISO 10865.1-2015.
4. Use of allocated space for other purposes
 - An allocated space may be used for other purposes if it is not required for use by a passenger in a wheelchair or similar mobility aid. This includes the use of fold down seats, which may occupy the vertical space when folded down and occupied by seated passengers.
5. Co-location of access paths, manoeuvring areas and allocated spaces
 - Access paths, manoeuvring areas and allocated spaces must be co-located to the extent practicable.
6. Manoeuvring area not to be compromised
 - If allocated spaces are consolidated, the access path leading to each space and the associated manoeuvring area for each space must not be compromised.
7. Informing other passengers of allocated space priority
 - Operators must clearly state through signs in allocated spaces and/or informing and educating other passengers that allocated spaces are priority spaces for people using mobility aids.

The Transport Standards Guidelines would be updated to reflect the Transport Standards amendments contain advice on the above regulatory requirements and the following additional parts:

- Continuous accessible journey – accessible access paths, manoeuvring areas and allocated spaces in a conveyance are links in the chain of access paths that need to be travelled during a public transport journey.
- Anticipating future demand – designers should attempt to anticipate future demand likely to be placed on public transport assets.

Following feedback through the Consultation RIS, the features for this option have been refined. The significant deviation from the Consultation RIS was refining the requirements for sub-option 2 and 3 to only require compliance with the safety elements of AS/NZS ISO 10865.1-2015. This is to address concerns raised that compliance with this standard could potentially cut off a proportion of the length of the allocated space due to the slope requirements of the standard.

²⁸ AS/NZS ISO 10865.1:2015 (p.2) excursion barriers: structures or devices designed to prevent the wheelchair from tipping, rotating or sliding into the center aisle or vehicle wall during transport.

Based on analysis of the submissions and impact analysis, sub-option 3 for the objects permitted to intrude the vertical space was selected. The sub-option was determined to provide adequate restrictions for objects intruding into the vertical space, while allowing, where installed, forward and lateral excursion barriers. This sub-option takes into account concerns regarding limited space on conveyances while still providing firm restrictions on any objects not directly related to the safety of the passenger travelling in the allocated space. It was seen as a relatively low risk to allow intrusions of vertical and lateral excursions as their purpose is to provide additional safety for the passenger using the allocated space. Further, it was viewed that this option would not provide a disincentive to install forward and lateral excursion barriers on conveyances where they are not currently installed.

There may be an opportunity cost to not adopt sub-option 4 if the listed features would not restrict manoeuvring or carriage of a mobility aid. This regulation may reduce certainty for operators and providers as mobility aid size, shape and design change. Operators and providers may procure buses with these features intruding into the space with the belief they are not restrictive, but may later find they are restrictive to certain mobility aids.

Guidance will stipulate that where installed, forward and lateral excursion barriers should be installed outside of the allocated space.

Eliminating Discrimination

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability.

Mandating requirements that prohibit intrusions of objects into the vertical space of allocated spaces, access paths and manoeuvring areas will provide necessary safety provisions for people with disability using areas. Discrimination against people with disability will be reduced by ensuring passengers traveling with a mobility device are afforded the same level of accessibility and safety of travel as passengers traveling without a mobility device. If a passenger traveling with a mobility device is unable to safely access the allocated space, this could prevent a passenger from being able to use public transport.

Consistent mandated requirements which ensure access paths, manoeuvring areas and allocated spaces are adequately defined and are free from intrusions appropriately reflects the practical requirements which enable safe travel. These amendments will help reduce the current barriers people with mobility impairments face when trying to use public transport.

Key Impacts

- Accessibility of access paths, manoeuvring areas and allocated spaces in conveyances would be maximised and made nationally consistent to the extent possible.
- Allowing for maximisation of seating capacity for when an allocated space is not in use (i.e. allowing fold down seats).
- Consistency with other sections of the transport standards relating to requirements for informing and educating passengers on the usage and priority of allocated spaces (for example alignment with priority seating requirements).
- Regulatory clarity on the vertical dimensions of an allocated space and what objects are permitted to intrude into the space.
- Accessibility for people using mobility devices will be improved.
- Provides accountability and impetus to improve accessibility.
- Limiting the intrusions of objects into the allocated space as per sub-option 3 may limit the scope for future design solution, flexibility and innovation of new safety features. Limited objects that can intrude into the vertical space may impact space available for other passengers.
- Installation and new design / fit out costs will be incurred.
- If reconfiguration is required, that is if operators and providers are required to remove items currently in the vertical space, these retrofitting costs could be significant.
 - There would be no reconfiguration requirements for the swept path width dimensions as these are the same as the current requirements for an access path on a conveyance.
- Retrofitting costs can be varied depending on the extent of implementing changes and how these changes apply retrospectively for existing assets. Costs would be comparative to the level and complexity of retrofit adopted.

- The performance based elements of the regulatory option allow a level of flexibility which can mitigate any installation or compliance costs.

The cost-benefit analysis for reforms to allocated spaces in transit returned a **Benefit-Cost Ratio of 4.7** (detail below).

In relation to concerns raised in government submissions regarding the removal of Section 2.6(3) of the Transport Standards, it can be assumed that only a small number of conveyances would be impacted by this change. The average life cycle of a bus is approximately 20 years and is likely to have been replaced since the inception of the Transport Standards. Further, trains and trams have until 2032 for the remaining existing fleet to become 100 per cent compliant. There may be some conveyances retrofitted post 2002 to meet the Transport Standards and the 800mm requirement, but it can be assumed that a majority of conveyances would already comply with the 850mm width requirement.

Impacted Parties

Individuals

Improving access to allocated spaces for people who require their use and increased safety and surety of travel for people with disability.

Ensuring people with disability can access allocated spaces on public transport will result in increased capacity to travel on public transport. This may result in greater participation of people with disability in the workforce and community life. Ensuring access paths are free from obstacles will assist in removing a barrier for people with disability using public transport.

Operators and Providers

Operators and providers will bear implementation and installation costs to adhere to the new requirements. These costs will be exacerbated if regulatory amendments are applied retrospectively.

Clarity and certainty for operators and providers regarding dimensions of an allocated space and what objects are permitted to intrude into the vertical space.

A majority of operators and providers acknowledged they already provide or aim to adhere to the prescriptive and performance based elements in the regulatory option. Thus, mandating these elements would mitigate implementation costs associated with the regulatory change

Indicative Regulatory Impacts per year

Regulatory Benefits

The Monash University Public Transport Amenity Values report suggests that allocated spaces has the potential to increase amenity for public transport users by:

- 0.14 in-vehicle time (IVT) minutes for all modes of transport.

While the amenity benefit relates to the existence of allocated spaces, it is recognised that the additional safety measures associated with this reform could add as much to 10 per cent of the amenity of the wheelchair / buggy space amenity category. The safety benefit associated with the regulatory option is only expected to reduce the number of slips, trips and falls by one per cent due to the high existing compliance rates. Further, the overall benefits were adjusted to recognised the high reported level of compliance with proposed measures.

Given the BCR for is greater than 1.0, regulatory reform in this area is estimated to result in net a net benefit relative to the status quo.

Regulatory Costs

The table below outlines the regulatory impact of implementing the regulatory option for allocated spaces in transit.

Table 15: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$0.3	\$0	\$0	\$0.3
Total over 20 years, by sector*	\$5.1	\$0	\$0	\$5.1

*The costs in Table 15 above have been determined based on the assumption that this regulatory change would be applied retrospectively over a compliance schedule. The annual total by sector is the average cost per year over the implementation timeframe of 20 years. Costs may be reduced or avoided if a longer schedule is applied to these requirements or if these requirements are not applied retrospectively.

There was no incremental cost assumed with updating a new conveyance to be compliant with the proposed reform. This is because in new conveyances with fresh fit out, the additional design requirements are not considered to be material incremental costs.

Further, the cost-benefit analysis was based off a regulatory option which included sub-option 1, the option that permits the least amount of objects into the allocated space and which would likely present the greatest financial cost. Thus, costs associated with the selected regulatory option are likely to be lower than estimated.

From CBA survey responses and appropriate extrapolation, it was assessed that ferries were zero per cent compliant with the proposed reform, trains were 90 per cent compliant and that a small number of buses would require updates. The cost of installing an allocated space in existing conveyances was assumed to be consistent across all modes and states and territories. This cost was valued at \$12,000 and was identified as an average value from CBA responses received (refer [Appendix B](#)).

The total number of conveyances are at [Appendix A](#)

While this calculation is estimated on installing a new allocated space in a conveyance, there would be additional costs associated if conveyances were required to expand dimensions of, or remove objects that currently intrude into the access path, manoeuvring area or allocated space. However, as a majority of operators and providers acknowledged they already provide or aim to adhere to the prescriptive and performance based elements in the regulatory option, and the width dimensions of the access path remain consistent at 850mm, it can be assumed a limited number of conveyances would be impacted by these additional costs.

5.4.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option for allocated spaces in transit is the **regulatory option**.

All responses from the disability community supported the regulatory option and highlighted that regulatory change in this area is necessary to ensure the safety and equivalent level of access for people with disability. The majority of public transport operators and providers supported consistency, and where possible they already aim to adhere to the prescriptive and performance based elements proposed. While the additional guidance in the non-regulatory option may assist operators and providers, there will still be a lack of regulatory certainty regarding vertical requirements of allocated spaces, manoeuvring areas and access paths which has been identified by the disability community as a safety risk and barrier to travel.

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability as reflected in the impact analysis and the resulting **Benefit-Cost Ratio of 4.7**.

This option has an estimated net regulatory cost of **\$5.1 million over 20 years** (costed on sub-option 1). However, given the preferred sub-option in the regulatory option is sub-option 3, it can be assumed that cost of implementation would be lower than the \$5.1 million indicative regulatory costs.

Case Study – Clarke uses a mobility aid device and catches the bus to work each day.

Status Quo – Clarke’s experience today

Clarke uses a mobility aid and is catching her usual bus to work today. While boarding the bus, she notices that the clear space along the access path contains an intruding grabrail and ticket validation device. This makes Clarke nervous about boarding because of the difficulty to navigate with her mobility aid around the intrusions. The ticket machine bumps Clarke on the shoulder as she tries to make her way to the allocated space and once there, she has difficulty circulating and positioning her mobility device safely due to folding seats that extend too far out. Clarke doesn’t feel properly secured as the bus moves into transit.

Preferred option - Clarke’s experience under the proposed regulations

Clarke boards the bus and has enough space to easily make her way to the allocated space because the hardware and fixtures for the use of passengers do not intrude into the access path. Clarke uses the manoeuvring area with ease to safely position herself and her mobility device into the allocated space. Clarke uses the ironing board for extra support and feels safe and secure as the bus moves into transit.

5.4.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

For allocated spaces in transit, the assumption for the CBA was that public transport operators and providers would be 25 per cent compliant at five years, 55 per cent compliant at 10 years, 90 per cent compliant at 15 years and 100 per cent compliant at 20 years as per Schedule 1 (allocated spaces).

5.5 Digital Information Screens

5.5.1 Problem and options

The Transport Standards were developed on the assumption that all signage was small, static, involving limited information content and requiring external illumination.

But in today's modern transport systems, public transport operators and providers are shifting to digital, dynamic systems which are often large and display detailed information to multiple users simultaneously. Operators and providers are increasingly utilising digital information channels to provide static and dynamic information to customers.

As digital display technology has been widely adopted since the introduction of the Transport Standards, there is often uncertainty around what is required to be delivered to meet the needs of people with disability or to comply with the Transport Standards. Other requirements are clear, but are considered to be inappropriate or technically unfeasible when applied to digital displays. These concerns are reflected in public submissions to reviews of the Transport Standards.

Whilst static signage continues to be relevant, particularly for the vision impaired who require braille or tactile elements, the current Transport Standards do not consider digital displays.

Table 16: Summary of Options for Digital Information Screens

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Provide additional guidance through the Whole Journey guide on digital information screens and design considerations.
Regulatory	Include performance requirements in the Transport Standards and Transport Standards Guidelines concerning digital screens and design requirements.

5.5.2 Consultation Findings

Responses from the disability community, industry and government all noted the role of digital information screens in effectively supporting the journeys of passengers. Responses often referenced how digital information screens act as a key component in the decision making process when planning journeys and navigating the public transport system. Consequently, there was broad support for improving guidance for public transport operators and providers regarding how best to ensure information presented via digital information screens is accessible. There was mixed support for the non-regulatory or regulatory option presented in the Consultation RIS.

There was very strong support from the disability community for regulatory reform as a pathway to remove ambiguity regarding design standards and improve consistency of service. Responses shared examples of the profound impact that clear, reliable and accessible information provision has on the experience of a public transport journey. Conversely, some responses shared examples of the impact that poor design practices can have on passengers:

Issues such as glare, insufficient luminance contrast and illegible font size and type contribute significantly to the access barriers that these screens present and, in turn, these access barriers contribute to the anxiety that people who have low vision often experience when using public transport, especially when they have to interact with complex transport infrastructure such as interchanges and hubs, where digital information screens are ubiquitous.

Vision Australia

Inaction in this reform area was linked to an inability to access next service or service disruption information, missed stops, or wrong decisions resulting from misinterpretation of information. A key concern raised by those who preferred the regulatory option was the lack of reference to digital screens and design requirements in the current Transport Standards. It was noted that there has been significant uptake of such displays since the Transport Standards were last

updated, and for this reason clear design requirements would provide certainty to passengers that information will be accessible.

There is ambiguity and uncertainty of what is required to be delivered to meet the needs of people with a disability and what is compliant

VisAbility

While all disability organisations and individuals who provided a specific response to the reform area supported the regulatory option, some responses proposed amendments to components relating to design standards. Responses suggested that the luminance calculation requirements included in ISO 9241-303 and font and typeface design requirements included in AS 1428.2-1992 are either inappropriate for inclusion in the Transport Standards or outdated, and alternative co-designed solutions should be investigated.

Regarding the inclusion of ISO 9241-303 in the regulatory option, it should be noted that the standard does take into account aspects of the eyesight of older people, and therefore contains information of value to identify solutions that support calculating luminance requirements suitable for people with vision impairment. The standard also provides additional resources that specifically address the needs of people with disability, including people who are blind or have low vision²⁹. Similarly, the inclusion of AS1428.2-1992, which was reconfirmed in 2015, provides valuable information on font and typeface requirements.

If new or revised standards are developed that provide greater clarity regarding font and typeface for digital information screens, these will be considered in future revisions of the Transport Standards.

Some submissions from individuals, disability organisations and government highlighted the importance of aligning reforms to digital information screens. There was support for reforms to the provision of information in multiple formats, particularly audio, to ensure the maximum possible benefit is achieved.

Submissions that supported the regulatory option frequently noted the importance of aligning the Transport Standards with industry best-practice. For example, some responses emphasised the importance of ensuring that digital information screens align with WCAG 2.1 and AS EN 301 549 (2020) design standards to ensure reforms are future proof and accommodate technological advancements. One disability organisation submission acknowledged that regulation must remain balanced to ensure that overly prescriptive standards do not hinder innovation, while still providing certainty of information service delivery to people with disability.

All responses from industry and government noted the role that digital information screens play in providing information to passengers, and recognised that design standards consistent with best-practice are important to ensure accessibility and prevent discrimination. Overall, these responses generally supported the non-regulatory option, citing the benefit of clear guidance material within the Whole Journey Guide as an appropriate mechanism to promote compliance. One government response provided suggested amendments to the regulatory option that addressed concerns the option contained unachievable elements.

A common theme among submissions that preferred the non-regulatory option was that reforms to digital information screens must be flexible enough to accommodate future technological innovations beyond the scope of the performance requirements listed in the regulatory option. The regulatory option was seen to be overly prescriptive or difficult to mandate, for some elements, potentially inhibiting future innovations and leading to perverse outcomes including unnecessary non-compliance.

Based on feedback received from governments and industry, the regulatory option has been amended to provide minimum design requirements, while encouraging best practice in the design and provision of digital information screens through the Whole Journey Guide.

During consultation, respondents to the online survey were asked what design features would improve their confidence when using digital information screens. Answers provided include:

²⁹ <https://www.iso.org/obp/ui/#iso:std:iso:9241:-303:ed-2:v1:en>

Bigger, bolder fonts, more clarity on which stops are on the journey (these need to be bigger font) and major stops and information announced [via] audio.

Taking note of which direction sun is coming from at the time of day the route has highest usage.

The train screens refresh too often – it would be better to display different info on different screens instead of refreshing one screen.

Less cluttered information; clearly defined with marked difference between background colour and text.

Responses from industry and government also cited the significant cost likely associated with retrofitting existing assets with digital information screens as being a barrier to compliance and therefore a justification for pursuing the non-regulatory option. However, information on potential costs seemed to vary substantially. Some submissions quoted retrofitting costs lower than that listed in the cost-benefit analysis, while some quoted costs significantly higher. Several responses sought clarity regarding the proposed implementation of this reform, and specifically asked whether this requirement will be made mandatory for existing assets.

5.5.3 Impact Analysis

Status Quo Option

Transport Standards requirements for static signs remain unchanged and will remain silent in relation to modern digital displays. Furthermore, the relevant Transport Standards references relate to static signs and are not always applicable for digital displays.

Eliminating Discrimination

The status quo will not address discriminatory outcomes that are currently occurring as a result of issues specific to digital information screens. The Transport Standards will continue to not reflect the ubiquitous nature of digital information screens on public transport or at public transport infrastructure. People with disability and public transport users will continue to experience the issues outlined in the problem statement.

Key Impacts

- There will be a lost opportunity to improve and strengthen digital information screen requirements to address the concerns raised through the consultation process.
- Digital information screens that are not designed in accordance with accessibility best practice may continue to operate, resulting in sub-par outcomes for people with disability.

Impacted Parties

Individuals

People with disability will continue to experience uncertainty when using public transport due to the inconsistent design of digital information screens. If screens are design in a manner that is not accessible, journey information may be miscommunicated, or barriers to travel may emerge.

Operators and Providers

Operators and providers may experience sub-optimal outcomes, as designers seek to resolve accessibility issues on their own and navigate insufficient requirements currently included in Transport Standards.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

The non-regulatory option involves updating the Whole Journey Guide to provide guidance on digital information screens and design considerations.

Content will be added to the Whole Journey Guide to recommend particular requirements in the design of digital screens. This would include recommendations and/or guidance on screen brightness, glare, location, font and typeface, polarisation of screens and information scrolling requirements.

For example, where digital screens are installed:

- Luminance – Information provided on screens should consider contrast requirements of text and luminance of the screen.
- Glare – The location of digital information display screens should take into consideration environmental factors such as glare to ensure legibility of screens during different periods during the day. Design considerations of screen housings should minimise the impact of glare.
- Location – Digital information screens should consider the location where people are likely to wait for services or where they can be visible during transit in comfortable common viewing zones. Further, they should consider the customer crowding levels expected at each location. Screens should be visible from accessible boarding points and waiting areas.
- Font and typeface – Similar to requirements for static signage. Fonts and typeface should consider viewing distance and should be sans serif typeface. Outputs and design elements should consider colour vision deficiencies and reduced vision acuity requirements.
- Polarisation - Displays should be readable in the designed orientation whilst wearing polarised eyeglasses.
- Scrolling requirements – To remain visible for 10 seconds unless it is for ticket validation purposes (existing requirement in Transport Standards).

The requirements should provide a clear understanding of what is expected to assist in the provision of information to make it legible and accessible. The guidance should reflect changes in technology and would provide flexibility to allow for future technological development.

The Whole Journey Guide would also benefit from the inclusion of referencing AS EN 301 549:2016 - accessibility requirements suitable for public procurement of ICT products and services. It is intended for use by public authorities and other public sector bodies during procurement, to ensure that websites, software and digital devices are more accessible, so they can be used by persons with a wide range of abilities.

Eliminating Discrimination

The non-regulatory option will assist operators and providers to reduce discriminatory outcomes.

The guidance to be included in the Whole Journey Guide will promote best practice in the design and procurement of digital information screens. To the extent that advice is adopted, design considerations concerning factors such as luminance, location and font size will provide a greater level of accessibility to a wider scope of passengers, improving the provision of information to passengers with disability. If guidance is adopted, barriers to travel associated with the status quo may be reduced.

The level of reduction of discrimination is scalable and cannot be guaranteed due to the discretionary nature of the option.

Key Impacts

- Public expectation for public transport operators and providers to provide accessible digital information screens, designed in accordance with best practice may increase. To the extent that guidance is adopted, additional installation, maintenance and administrative costs may be incurred.
- The benefits of this option will only be realised to the extent that operators and providers choose to comply with the guidance, and therefore costs can be managed to suit the operational requirements of each operator and provider – for example, through staged implementation.

- Provides flexibility to accommodate future technological changes and innovation that fall outside the scope of the guidance material. Due to the discretionary nature of the option, however, the option does not provide certainty, and inconsistency between jurisdictions and modes of transport may remain.
 - For example, the location and font size on screens may be different across public transport sites depending on where you are.

Impacted Parties

Individuals

People with disability will benefit, to the extent that guidance is adopted, from improved access to information related to their public transport journey. This may result in increased confidence when travelling, reduce miscommunication, and enable greater engagement in the community.

Operators and Providers

Operators and providers will benefit from the certainty of design requirements and the flexibility of the guidance to accommodate diverse situational needs. Operators and providers will bear the implementation costs, however these costs can be managed by individual providers, including through phasing the implementation of the guidance.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

The regulatory option would require the inclusion of performance requirements in the Transport Standards and Transport Standards Guidelines on digital information screens and design requirements. This would be based on requirements prescribed in the Australian Standards 1428 suite of standards.

Section 27.1 of the Transport Standards currently provides that 'general information about transport services must be accessible to all passengers'. The regulatory option proposes that where display screens are used on transport infrastructure, premises and conveyances, they must meet the following requirements:

- Luminance - The ISO standard 9241-303 Ergonomics of human-system interaction – Part 303: Requirements for electronic visual displays will apply to luminance calculation requirements.³⁰
- Polarisation - displays must be readable in the designed orientation whilst wearing polarised eyeglasses.
- Location - line of sight to the display shall be maintained free of obstructions from defined viewing areas, inclusive of the display enclosure or housing.
- Font and typeface - the heights of letters given in Table 2 of AS 1428.2-1992 are interpreted as capital 'l' heights consistent with AS 1744 Standard alphabets for road signs. For viewing distances not specified in Table 2 of AS 1428.2-1992, the height (h) of letters in millimetres for arbitrary viewing distance (d) in metres is calculated as $h = 3.2 \times d$.
- Display requirements – to remain visible for 10 seconds unless for it is for ticket validation purposes (existing requirement in Transport Standards).

The Transport Standards Guidelines would be updated to reflect the new requirements and provide further guidance on their application. Specifically, guidance may include:

- Location of digital screens - The recommended location of digital screens can be seen by passengers regardless of the access path they have used, and who are required to board in specific locations (e.g. designated boarding locations for passengers who require a boarding ramp).

³⁰ The requirements of section 17.3 in AS 1428.2-1992 are not applicable where light emitting displays are used (traditional luminance standard for static elements)

- Display requirements – Guidance will be provided on the use of the digital screens and the provision of information in multiple formats, to accommodate the diverse needs of passengers.
- Glare – The location of digital information display screens should take into consideration environmental factors such as glare to ensure legibility of screens during different periods during the day. Design considerations of screen housings should minimise the impact of glare.

Additional recommendations will be included in the Whole Journey Guide concerning best practice, to promote outcomes beyond that of the requirements included in the regulatory option.

The regulatory option considers concerns raised through submissions that overly prescriptive requirements could stifle innovative solutions. Though the option does outline design requirements, these are outcome focused and should not prevent the uptake of new technologies.

Two components of the performance requirements – Luminance and Font and Typeface – do contain prescriptive elements related to calculation methods and font size – but serve as important certainty measures to ensure information is provided accessibly.

Following feedback through the Consultation RIS, the features for this option have been refined. The major deviation from the Consultation RIS is:

- Design requirements concerning glare have been moved from mandatory performance requirements to inclusion in the Transport Standards Guidelines as best practice guidance.

Eliminating Discrimination

The regulatory option will provide the greatest opportunity to reduce discrimination against people with disability.

Mandating design requirements for digital information screens will ensure that digital screens provided across public transport networks are accessible and designed with consideration of the diverse needs of people with disability. Digital information screens are an important source of journey information for all passengers. The design requirements included in the regulatory option, including technical specifications and location requirements, provide certainty to people with disability that information provided on digital information screens will be accessible. Additionally, the regulatory option clearly outlines the obligations of operators and providers to provide digital information screens in a manner that reduces discrimination, while providing additional best practice guidance to promote greater outcomes.

Key Impacts

- The Transport Standards would include specific reference to digital information screens on conveyances and at public transport infrastructure, reflecting the proliferation of digital displays as a primary means of accessing information.
- Digital information screens will be designed, located and provided in accordance with best practice for accessibility. Depending on implementation, additional installation, maintenance and administrative costs would be incurred to ensure screens are compliant with new regulatory requirements.
- Specific design standards will be referenced to ensure consistency across jurisdictions and modes of transport. If updated standards are released, these standards would become superseded and subsequent reviews of the Transport Standards would need to investigate revisions.

The cost-benefit analysis for regulatory reforms to digital information screens returned a **Benefit-Cost Ratio of 5.5** (detail below).

Impacted Parties

Individuals

People with disability will benefit from greater confidence that information provided on public transport or at public transport infrastructure will be accessible. This may result in increased use of public transport, given the reduced anxiety and increased independence associated with the provision of accessible screens. Consistency across jurisdictions and

modes of transport will reduce discrimination for all passengers. Passengers who are blind or have low vision will be assisted by luminance contrast and font and typeface requirements that result from inadequate digital information screens. These benefits may be limited, however, if information is not also provided in a variety of other formats such as audio announcements and Auslan.

Operators and Providers

Operators and providers will benefit from clarity regarding design requirements to ensure digital information screens are accessible, including calculation methods. Operators and providers will bear installation and ongoing monitoring costs to adhere to the new requirements. The extent of these costs will be impacted by the implementation of regulatory requirements and whether they are applied retrospectively.

Indicative Regulatory Impacts per Year

Regulatory Benefits

The Monash University Public Transport Amenity Values report suggests that improvements to digital information screens have the potential to increase amenity for public transport users by:

- 0.99 in-vehicle time (IVT) minutes for buses
- 0.48 IVT minutes for trams / light rail
- 2.75 IVT minutes for trains.

The amenity benefit largely relates to the existence of digital information screens, and the majority of benefit would be related to the information contained on the screen. It is expected that the changes to accessibility could lead to approximately five per cent uplift in amenity.

Given the BCR is greater than one, regulatory reform in this area is estimated to result in a net benefit relative to status quo.

Regulatory Costs

The table below outlines the regulatory impact of implementing the regulatory option for digital information screens.

Table 17: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$4.2	\$0	\$0	\$4.2
Total over five years, by sector*	\$21.1	\$0	\$0	\$21.1

**The costs in Table 17 above have been determined based on the assumption that this regulatory change would be applied retrospectively over a compliance schedule. The annual total by sector is the average cost per year over the implementation timeframe of five years. Costs may be reduced or avoided if a longer schedule is applied to these requirements or if these requirements are not applied retrospectively.*

The cost associated with the upgrade of existing digital information screens used was \$17,136 and was assumed to be consistent across all modes and states and territories. This was the average figure quoted in CBA survey responses received. It was assumed that there is no incremental cost for the upgrade of new digital information screens beyond initial procurement. Information relating to the rate of replacement provided through the survey responses was accounted for in cost analysis, but indicated a negligible effect.

Survey responses indicated approximately 1 non-compliant digital information screen for every 125 sites across bus and tram / light rail stops and 1 non-compliant screen for every 5 train stations and ferry terminals. The number of digital information screens to be upgraded was extrapolated based on the limited number of responses. Approximately 1,232 digital information screens would require upgrade if the regulatory option is selected. Airports and certain areas of train

stations are covered under the Premises Standards. For this reason, there were fewer screens factored into the cost-benefit analysis for these modes (refer [Appendix B](#)).

5.5.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option is the **regulatory option**.

The disability community overwhelmingly supported regulating design requirements to ensure digital information screens, a key source of journey information for all passengers, are provided in accordance with best practice. While the majority of operators and providers supported the non-regulatory option via the provision of guidance material, the proposed regulatory option has been shaped following consultation to ensure it minimises prescriptive requirements which were of concern to operators and providers.

The regulatory option was selected to ensure design requirements that consider the diverse needs of people with disability are mandated, improving consistency across jurisdictions and providing essential information to increase the confidence and independence of passengers with disability. The design requirements in the regulatory option are primarily outcome focused, and should not stifle innovation or prevent the uptake of new technologies. Two elements of the performance requirements – Luminance and Font and Typeface – have retained prescriptive elements as they serve as important certainty measures.

The cost-benefit analysis for regulatory reforms to digital information screens returned a **Benefit-Cost Ratio of 5.5**

This option has an estimated net regulatory cost of **\$21.1 million over five years**.

Case Study – Shirley is an elderly retiree who is vision impaired and suffers from anxiety which can be triggered when overwhelmed by difficulties experienced undertaking suburban train trips.

Status Quo – Shirley’s experience today

Shirley’s daughter takes her into the city centre to her medical appointment. To return home, Shirley will take the train as she has done before. Due to her age-related vision impairment Shirley has difficulty reading the digital information screens at the station, especially when trying to find the right train and platform to return home. Shirley feels overwhelmed and starts to panic. There are a lot of people around but Shirley is not sure what to do. Shirley calls her daughter who leaves work to come and get her and take her back home.

Preferred option – Shirley’s experience under the proposed regulations

Shirley’s daughter takes her into the city centre to her medical appointment. To return home, Shirley takes the train home from the city. Even though Shirley suffers from age-related vision impairment, the text and characters have consistent luminance contrast with the surrounding field, appropriate point size to viewing distance, typeface, location and other display requirements on the digital information screens that allows her to confidently and independently find the right service and platform location to journey home from the very busy city station.

5.5.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

The proposed changes to digital information screens will represent a new requirement in the Transport Standards. The assumption for the CBA was that public transport operators and providers would be 100 per cent compliant within five years.

5.6 Lifts

5.6.1 Problem and options

The Transport Standards require lifts to comply with Australian Standard AS1735.12 (1999) which is an outdated standard and is not aligned with requirements under other standards for lifts, such as those under the Premises Standards and the National Construction Code (NCC). This misalignment causes a number of issues: AS1735.12 (1999) infers that only electric passenger lifts and electrohydraulic passenger lifts can be used for public transport premises and infrastructure, limiting options available for designers. The size of the floor dimensions - 1100 mm wide by 1400 mm deep – are far smaller than other standards and the standard prescribes inferior audible and visual indication requirements.

The Premises Standards and the NCC allow for larger lifts if they need to travel more than 12 m in height and the NCC also allows for space for a stretcher. On this basis, all lifts in public transport premises and infrastructure should allow a clear length of at least 2000mm and clear width of at least 1400 mm.

The NCC and the Premises Standards offer more lift type options for various applications that are more cost-effective than electric passenger lifts and electrohydraulic passenger lifts. Also, revising the Transport Standards to include enhanced audible and visual indication that are in the Premises Standards and the NCC will achieve harmonisation for people with disability as well as industry and designers.

In situations where a lift is the sole access path for passengers using mobility aids or who have another significant mobility impairment, the unavailability of the lift due to scheduled maintenance or unplanned repairs will result in a denial of service. The duration of the service denial will vary according to the extent of work required, the location of the lift (in either a metropolitan or regional area) and the contractual arrangements covering the lift.

Table 18: Summary of Options for Lifts

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Expand Section 3.5.4 in The Whole Journey to provide more specific detail on the additional lift accessibility enhancements to align with the Premises Standards and NCC to ensure best practice for accessibility.
Regulatory	The Transport Standards are amended to provide more specific detail on additional lift accessibility enhancements to align with the Premises Standards and NCC. Transport Standards Guidelines would be to ensure consistency with the new Transport Standards requirements and to encourage operators and providers to consider accessibility during lift downtimes.

5.6.2 Consultation Findings

Consultation with stakeholders supported the problems identified in the Consultation RIS: misalignment with the Premises Standards and the National Construction Code, a lack of audible announcements and a lack of access to public transport when lifts are unavailable. Submissions from all stakeholders supported the regulatory objective of harmonising the Transport Standards with the Premises Standards for new lifts. The misalignment serves no purpose and only burdens industry, whilst mandating a substandard level accessibility below what the disability community expect.

We strongly endorse consistency in terms of lift requirements under the NCC, the Premises Standards and the Transport Standards

Physical Disability Council of NSW

Submissions from industry and government cited high costs and low comparative benefits to retrofit existing lifts to the new requirements, particularly in the cases where the lift footprint would be expanded to fit larger dimensions. However, operators and providers also reported they meet a number of standards when building lifts including the Premises Standards which often far exceed the current requirements of the Transport Standards.

Submissions from the disability community were supportive of additional requirements being mandated to address maintenance and out of service time. Submissions outlined the barriers that are caused by lifts that are out of service, and lifts that do not have appropriate audible and visual information. In cases where the audio announcements are not present, or are too quiet to be heard over the ambient noise, people who are blind or have low vision reported being unable to negotiate premises and infrastructure safely and independently.

People with vision impairments may be disoriented regarding their location due to a lack of audio identification of landings.

Queenslander's with Disability Network

In cases where a lift is inoperable and there is no alternative access path, people with disability report they are unable to access public transport. This is compounded by a lack of communication or information about lift maintenance and can result in people with disability arriving at a location to begin their journey, and being unable to use public transport, or being becoming stranded at a public transport site without any way to continue their journey. Submissions also reported lifts can be out of service for months at a time.

A person reported catching the train from Perth to Midland one evening after work and were advised that the line ended in Bassendean due to track works. The platform is below ground level and when they got off the train and attempted to use the lift to access the replacement bus being offered was advised that the lift was broken. The staff were unable to assist, as there was no contingency plan, and their only option was to get back on the train going towards the city and get off at another stop. This stop was not offering the replacement bus service however, and they had no way of getting home.

National Disability Services

Submissions from government did not support the maintenance and downtime regulations, suggesting they were infeasible or impossible to achieve in practice. Lift repairs and maintenance may involve complex issues out of the control of the operator and provider, and as a result a maximum acceptable downtime cannot be guaranteed. Depending on the maintenance required, lifts may only be out of service for a short period of time, however if complex repairs or refurbishments are required, the lift may be out of service for a much longer period of time, such as if replacement parts must be sourced from overseas. These regulations may result in conflicts between the need to ensure lift safety and the need to return the lift to service as quickly as possible. However, submissions did not cite concerns with these elements of the regulatory option instead being provided as guidance, as they may assist operators and providers to improve the accessibility of their network.

Some of the proposed regulatory changes related to maintenance are unfeasible and do not take into consideration site and situational complexities that may arise.

NSW Government

5.6.3 Impact Analysis

Status Quo Option

The Transport Standards requirements remain unchanged without any additional lift requirements to align with the Premises Standards and NCC. Section 13.1 of the Transport Standards adopts AS1735.12 (1999) in its entirety, whereas the NCC and the Premises Standards only adopts specific parts of AS1735.12 (1999), as well as several other additional or varied access provisions.

The key discrepancy between the Transport Standards and the NCC/Premises Standards are the inferior audible and visual indication requirements and the floor dimensions of a lift car. With the Transport Standards solely relying on AS1735.12 (1999), the minimum lift car internal dimensions for any lift needs to be 1100 mm wide by 1400 mm deep. The NCC and the Premises Standards adopt these dimensions for low rise buildings, as well as the provision of larger lift floor dimensions (1400 mm wide by 1600 mm deep) when a lift travels more than 12 m.

Eliminating Discrimination

The status quo will not address discriminatory outcomes that are currently occurring such as when lifts do not provide adequate indication or when lift sizes are too small to convey larger mobility aids. People with disability will continue to experience issues outlined in the problem statement. Operators and providers will continue to have unclear regulatory requirements and lack guidance on lift downtimes, decreasing their ability to ensure their services do not discriminate.

Key Impacts

- There will be a lost opportunity to include more accessible enhancements to lifts in public transport facilities and align with the NCC and the Premises Standards.
- Operators and providers will have a lack of certainty as to the types of lifts that can be used under the Transport Standards.
- Any lifts with poor audible indication of landings may not be upgraded, reducing accessibility for people who are blind or have low vision.
- Operators and providers would not be encouraged to reduce lift downtimes, as a result, people with disability may continue to experience incidents where they are unable to access public transport at a particular location for an extended period of time.
- Operators and providers will not be subject to any additional costs or administrative burden, as they will not be required to upgrade any existing lifts to increase the size of the lift footprint or add accessibility features.

Impacted Parties

Individuals

Individuals with disability may continue to face discrimination when using public transport when using older lifts that do not meet modern standards or when lifts are out for maintenance.

Operators and Providers

Operators and providers will continue to have different requirements under the Transport Standards and under other standards, causing unnecessary regulatory complexity.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

Expand Section 3.5.4 in The Whole Journey to provide more specific detail on the additional lift accessibility enhancements to align with the Premises Standards and NCC to ensure best practice for accessibility.

The non-regulatory option should include advice on the following:

- Highlight that Australian Standard AS1735.12 (1999) is the key standard adopted in the Transport Standards
- Lift floor dimensions should be 1600 mm wide by a clear depth of 2000 mm.
- Automatic audible and visual information should be provided within a lift to identify the level (or platform) each time the car stops.
- Audible information should be provided in a range between 20 dB(A) and 80 dB(A) at a maximum frequency of 1,500 Hz.
- Lift downtime, whether for maintenance or repair, should be minimised as far as possible. Work should be scheduled for times that cause least disruption to people's travel.
- Lift service contracts should state maximum acceptable downtime for scheduled maintenance and inspection work.
- When lifts are unexpectedly out of service, operators and providers should ensure that the lift is returned to service as quickly as circumstances permit.

- If lifts are out of service operators and providers should endeavour to ensure equivalent means for people reliant on the lift to continue their journey.

Eliminating Discrimination

The non-regulatory approach will assist operators and providers to reduce discriminatory outcomes.

The guidance for when lifts are under maintenance or out of service may help to ensure people who rely on lifts can access public transport. The guidance for lift communications and size may also help improve accessibility for passengers who are blind, have low vision, or use mobility aids if implemented. However, the regulatory requirements will remain inconsistent with the requirements of the Premises Standards, potentially leading to reduced accessibility for people with disability.

Key impacts

- As the suggested access provisions would be promoted as guidance, any extra costs imposed by meeting the outcomes would be at the discretion of the operator or provider installing the lifts.
- The adoption of the proposed access provisions would provide greater certainty that their lifts comply with the Transport Standards' requirements.
- Any upgrades conducted as a result of this guidance would enhance lift accessibility, however these may be costly depending on the specific requirements of each lift and existing lifts that are currently too small may not be upgraded.
- Guidance provided may assist or encourage operators and providers to enact policies reduce out of service times where possible, increasing costs and decreasing the out-of-order time for lifts.
- For operators and providers, the design process may become initially more onerous, but as they become more accustomed to the new design parameters, this qualitative difficulty will diminish.
- As adoption of the suggested access provisions in The Whole Journey Guide will only be discretionary for operators or providers, no national consistency of lifts can be guaranteed.
- Accessibility issues related to the current provisions for lifts in the Transport Standards may continue, limiting the accessibility of the transport network.
- There would be an opportunity cost to include more accessible enhancements to align with the NCC and the Premises Standards, which would not reduce regulatory burden for operators and providers.

Impacted Parties

Individuals

As far as the guidance is followed, lift accessibility will improve, particularly for people who have low vision or are blind. Public transport users may be reassured by the accessibility of the public transport network as a whole if they encounter lifts that are more accessible and are out of order less frequently.

Operators and Providers

Any operator or provider who installs and maintains lifts as per the suggested access provisions in the Whole Journey Guide would ensure that accessibility for passengers with disabilities would be maximised, as well ensuring more consistency with the Premises Standards, the NCC and the intent of the DDA to eliminate discrimination.

Operators and providers will have a clearer understanding of their requirements for lifts which are required to comply with the Transport Standards and the Premises Standards.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

The Transport Standards are amended to provide more specific detail on additional lift accessibility enhancements to align with the Premises Standards and NCC to ensure best practice for accessibility, as well as updating the Transport Standards Guidelines to ensure consistency with the new Transport Standards requirements.

The regulatory option should include the following elements:

- Maintain Australian Standard AS1735.12 (1999) as the key standard except for the following accessibility enhancements:
 - Lift floor dimensions of not less than 1600 mm wide by a clear depth of 2000 mm to accommodate a stretcher.
 - Automatic audible information within a lift to identify the level (or platform) each time the car stops as per AS1735.12 (1999).
 - Audible and visual indication at each lift landing to indicate the arrival of a lift car.
 - Audible information and audible indication are provided in a range between 20 dB(A) and 80 dB(A) at a maximum frequency of 1,500 Hz.
- Allow the use of inclined lifts and small sized, low speed automatic lifts in limited applications in alignment with the NCC and the Premises Standards.

Following submissions and stakeholder feedback, the features for this option were refined compared with the option put forward for initial consultation. The major deviations from the Consultation RIS were the removal of elements relating to maintenance and downtime requirements. These elements were identified in submissions as impractical or impossible to achieve and were argued to be beyond the scope of the Transport Standards. These are instead suggested as best practice guidance to be incorporated into the Whole Journey Guide.

Advice would be provided in The Whole Journey Guide encouraging operators and providers to do the following:

- Where possible lift downtime, whether for maintenance or repair, should be minimised to ensure access paths for people who rely on lifts are open as often as possible.
- Where possible work may be scheduled for times that cause least disruption to people's travel.
- Lift service contracts may state maximum acceptable downtime for scheduled maintenance and inspection work.
- Whenever lifts are out of service operators and providers may use equivalent means for people reliant on the lift to continue their journey.

Eliminating Discrimination

The regulatory approach will provide the greatest opportunity to reduce discrimination against people with disability. The regulatory amendments will ensure lifts are meeting accessibility requirements necessary to ensure they can be used by people who are blind or have low vision by standardising lift announcements. Guidance for when lifts are under maintenance or out of service may help to ensure all passengers who rely on lifts can access public transport during periods of lift downtime.

Key impacts

- The cost of this option will vary greatly depending on the degree to which upgrades or retrofitting are required. This regulatory option may only be applied to new lift facilities which would impose no additional costs.
- The accessibility of lifts will be improved for users of mobility aids and for people with low vision, who are blind or who have impaired hearing where upgrades are completed.
- Operators and providers will benefit from harmonised regulatory requirements for lifts across the Transport Standards, Premises Standards and NCC, reducing the burden of complying with a variety of legislative requirements.
- Advice on out of service lifts may assist operators and providers to ensure their services are accessible to people with disability as frequently as possible, and disruptions are limited.

- The design process may become initially more onerous for any lifts that do not meet the prescribed requirements. However, many operators and providers report they already meet the prescribed standards in the regulatory option.
- Any lifts requiring retrofitting may have a high cost to meet these requirements, and may be out of order while the upgrades are made. Any change to the size of an existing lift may result in a high cost to the operator.

Impacted Parties

Individuals

Public transport users may be reassured by the accessibility of the public transport network as a whole if they encounter lifts that are more accessible and are out of order less frequently. People with low vision or who are blind may find lifts more accessible due to the enhanced audio indication.

Operators and providers

The regulatory burden of complying with a variety of standards for lifts will be reduced as the Transport Standards will be aligned with the Premises Standard and National Construction Code, which exceed the Transport Standards in their requirements. There will be no new requirements for new lifts beyond the Premises Standards. The range of lifts that can be provided in public transport infrastructure will be more flexible once the requirements for size and information are met. Whilst no retrospective requirements are expected to impact operators and providers, there would be a high cost to procure lifts in existing facilities with non-compliant lifts. As such, operators and providers may incur costs if this option is applied retroactively within the service life of a non-compliant lift.

Indicative Regulatory Impacts per year

Regulatory Benefits

The primary benefit of the proposed reform is the prevention of future dis-benefit, that is, any changes by operators and providers that could result in decreased accessibility in the future is prevented by implementation of the reform. As it is assumed that all infrastructure and conveyances are compliant, there is no immediate benefit to the proposed reform.

The proposed reform simplifies the regulatory environment as it aligns the Transport Standards with the Premises Standards.

There is no Benefit-Cost Ratio for this option as assumptions used to inform the CBA could not identify a regulatory cost with implementation of this reform.

Regulatory Costs

Survey responses as part of the cost-benefit analysis were unable to identify cases where a lift was not at least partially covered by the Premises Standards which have greater requirements than the Transport Standards. Further, an assumption used to inform the CBA was that as a practical procurement consideration, even lifts that are not covered under the Premises Standards would still be compliant. Any unidentified fringe cases where the regulatory burden increases for operators and providers of lift facilities should be offset by the benefit of a simplified regulatory environment.

The table below outlines the regulatory impact of implementing the regulatory option for lifts.

Table 19: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$0	\$0	\$0	\$0
Total over 10 years, by sector	\$0	\$0	\$0	\$0

The proposed reform aligns requirements in the Transport Standards with the Premises Standards. For this reason, any lift that partially enters premises covered by the Premises Standards is already required to meet the higher standard that would be required under the proposed reform. In CBA survey responses and further consultation with stakeholders, no non-compliant lifts were identified. The majority of lifts in the public transport network are either partially or fully on premises that fall under the Premises Standards. Further, it is recognised as a practical procurement consideration that even lifts that are not covered by the Premises Standards would still be compliant.

5.6.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option for lifts is the **regulatory option**.

Consultation found people with disability are negatively impacted by the current provision of lifts and found strong support for harmonisation of the regulations in the Transport Standards and Premises Standards. The impact analysis indicates a low negative impact and strong benefits for the regulatory option presented. The regulatory amendments reduce regulatory burden for operators and providers by harmonising lift requirements with the Premises Standards, and guidance will assist operators and providers to address other negative impacts on people with disability, such as lift downtimes. Whilst non-regulatory guidance may assist operators and providers, it would not resolve the issues with the existing regulation's misalignment identified by stakeholders.

This option has **no estimated regulatory cost**.

5.6.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

For lifts, the assumption for the CBA was that lift facilities are already compliant with the requirements, or would not be required to comply under the unjustifiable hardship provisions.

5.7 Website Accessibility

5.7.1 Problem and options

Transport operators and providers are increasingly using websites and other online systems to communicate service information to customers. Generally, this can either be static information, such as general information in text form, or dynamic information such as trip planning tools. Websites allow operators and service providers to give passengers access to large amounts of information that offers a high level of flexibility unlike other information formats.

Initial consultation indicates that many people with intellectual disability have difficulty navigating websites, caused by the plethora of information displayed on screens, as well as difficulty in comprehending complex sentences, syntax and unfamiliar jargon. The current Transport Standards do not reflect industry standards concerning minimum requirements for website accessibility. Given there are different levels of accessibility, a minimum standard could be adopted to provide certainty to customers around access to information and to operators and service providers about their obligations to provide accessible information.

The Whole Journey Guide points to the need to address web content accessibility guidelines, and identifies the Website Content Accessibility Guidelines (WCAG) standard as part of the guidance on pre-journey planning. However, no specific level of WCAG compliance is identified and it is known that some service providers are currently not compliant with WCAG standards.

Web Content Accessibility Guidelines (WCAG) are an internationally recognised standard that documents how to make web content more accessible for people with disability. WCAG 2.1, which builds on WCAG 2.0, addresses changes to the web, including the proliferation of mobile devices, and how technologies can be used to enable equal access for all. WCAG AAA requirements builds upon WCAG AA requirements, but with more enhanced features.

Table 20: Summary of Options for Website Accessibility

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Guidance on web content accessibility in the Whole Journey Guide would be expanded to include advice from the Australian Government on minimum website design. The guidance would recommend that the minimum level of WCAG compliance a transport provider or operator is WCAG 2.0 AA with consideration for WCAG AAA for some elements of their web content where practicable
Regulatory	The inclusion of mandatory prescriptive requirements in the Transport Standards regarding website accessibility. Four sub-options are included, each mandating a different level of WCAG compliance. <ol style="list-style-type: none"> 1. Websites to meet WCAG 2.0 AA 2. Websites to meet WCAG 2.0 AAA 3. Websites to meet the current version (2.1) of WCAG AA 4. Websites to meet the current version (2.1) of WCAG AAA

5.7.2 Consultation Findings

All responses to the Consultation RIS that addressed Website Accessibility supported regulatory reform in the Transport Standards. Responses raised concerns that the current Transport Standards do not reflect industry standards and international best practice regarding the minimum requirements for website accessibility, resulting in inconsistency and decreased confidence for passengers.

It is unacceptable that current practices do not reflect industry standards, meaning the accessibility of operator and provider websites are inconsistent and inaccessible for many people with disability. The Web Content Accessibility Guidelines are recognised as international best practice and the Transport Standards should be amended to reflect this.

Public Interest Advocacy Centre

Disability organisations and individuals strongly supported the notion that mandating prescriptive standards will facilitate better and more reliable access to information on public transport websites, resulting in greater independence for people with disability. Responses to the Consultation RIS frequently cited issues with mobile browsing as a critical issue requiring reform. These responses noted that given a significant proportion of passengers access public transport websites when in transit, it is integral that the Transport Standards consider mobile devices. User surveys identified that incompatibility with mobile devices may dissuade usage of public transport.

Accessibility of websites by mobile devices is non-negotiable as these devices are now ubiquitous.

Queenslanders with Disability Network

Sub-option 3 of the regulatory option requires that websites meet WCAG level AA in an up-to-date version (for example, version 2.1). WCAG 2.1 includes provisions for mobile browsing, whereas WCAG 2.0 does not. Several submissions, particularly from the disability community, stated that for this reason WCAG 2.0 is inadequate in eliminating discrimination. It should be noted that sub-options 1 and 2 of the regulatory option put forward in the Consultation RIS specifically reference WCAG 2.0. Moreover, responses recognised that WCAG 2.1 is now referenced in other standards, such as accessible public ICT procurement. For this reason, reference to WCAG 2.0 in the Transport Standards would perpetuate inconsistencies with other standards.

Industry and government also showed support for regulating website accessibility requirements. Several responses shared their own experience in improving website accessibility, including through internal audit processes to ensure compliance with WCAG 2.0AA guidelines. Generally, these responses highlighted the merit of upgrading websites to meet compliance with WCAG 2.1 standards to provide a greater level of accessibility for passengers and therefore improve outcomes.

Some submissions supported mandating WCAG 2.1 AAA requirements to ensure the broadest spectrum of users is accommodated. Responses stated that this is particularly relevant for users with screen readers, for example, and therefore compliance with WCAG AAA requirements should be pursued. The majority of submissions, however, stated that AAA requirements in entirety are inappropriate for application on public transport websites. These responses, from both disability organisations and industry, raised concerns that compliance with AAA requirements is not feasible or achievable due to the dynamic nature of information provided on public transport websites. If sub-option 2 or 4 of the regulatory option were selected, therefore, content like detailed maps may be considered non-compliant, and therefore could result in perverse outcomes for passengers. Reflective of consultation findings, the regulatory option has been amended to include additional guidance in the Whole Journey Guide citing the merit of WCAG AAA compliance where possible, to maximise benefit for website users.

Alternatively, some responses suggested that additional guidance material could be provided in the Whole Journey relating to WCAG AAA design standards, to be met where practicable. Several submissions cited that this approach reflects advice from W3C, the creators of WCAG, who do not “*recommend that Level AAA conformance be required as a general policy for entire sites because it is not possible to satisfy all Level AAA Success Criteria for some content*”.³¹

5.7.3 Impact Analysis

Status Quo Option

No change is made to the Transport Standards or Transport Standards Guidelines.

³¹ <https://www.w3.org/TR/UNDERSTANDING-WCAG20/conformance.html>

The standard would continue to not reflect current industry standards, meaning the accessibility of various providers and operators' websites will continue to be inconsistent.

State-based and federal policy would continue to apply concerning the requirement that government websites must conform to WCAG 2.0 Level AA at the minimum level.

Eliminating discrimination

The status quo will not address discriminatory outcomes that are currently occurring. People with disability and public transport users will continue to experience the issues outlined in the problem statement.

Key impacts

- There will be a lost opportunity to strengthen accessibility requirements for public transport websites to address the known issues and concerns raised through the consultation process.
- Inconsistency in the design standards of public transport websites will remain.
- Barriers to travel associated with issues accessing journey information via mobile devices may remain.

Impacted Parties

Individuals

People with disability will continue to navigate public transport websites that are not designed in accordance with industry best practice standards for accessibility. Inconsistent design standards between government and non-government websites may continue to serve as a barrier to travel for some passengers.

Operators and Providers

Operators and providers will be provided no formal guidance regarding how to ensure the needs of passengers with disability are accommodated on their websites. In some cases, information hosted on public transport websites will be inaccessible, resulting in sub-par travel outcomes for passengers.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

This option would see the current guidance on web content accessibility in the Whole Journey Guide expanded to include advice from the Australian Government on minimum website design. The guidance would recommend that the minimum level of WCAG compliance a transport provider or operator is WCAG 2.0 AA with the current version of WCAG AA being preferred, with consideration for WCAG AAA for some elements of their web content where practicable.

Eliminating discrimination

The non-regulatory option will assist operators and providers to reduce discriminatory outcomes.

Guidance provided in the Whole Journey Guide will provide a minimum standard from which public transport websites can be designed to ensure accessibility. To the extent guidance is adopted, greater consistency between operators and providers will be achieved, resulting in greater access to information for some users. WCAG 2.0 does not include provisions for mobile devices, and therefore the option does not guarantee the maximum possible benefit for people with disability.

The level of reduction of discrimination is scalable and cannot be guaranteed due to the discretionary nature of the option.

Key impacts

- Guidance will clearly outline WCAG 2.0 AA requirements to encourage public transport website design to consider accessibility requirements. To the extent that guidance is adopted, costs associated with website audit, upgrade and maintenance may be incurred.
- Provide flexibility to accommodate the diverse forms of content included on public transport websites, but due to the discretionary nature of the option, does not provide certainty that websites will be maintained in accordance with accessibility requirements. This may result in different levels of accessibility across different transport websites. If guidance is not adopted, the Transport Standards would continue to not reflect current industry standards.

Impacted parties

Individuals

People with disability will benefit, to the extent that guidance is adopted, from the provision of accessible information on public transport websites. This may result in improved interaction between people with disability and websites, increasing the confidence of individuals to travel. If operators and providers choose to not implement the recommendations in the Whole Journey Guide, sub-par outcomes may result.

Operators and Providers

Operators and providers will benefit from clear guidance regarding accessible website design. The discretionary nature of this option provides flexibility to operators and providers to accommodate the diverse forms of content that are hosted on public transport websites. There may be costs associated with upgrading websites to meet compliance with guidance. Costs to upgrade websites will only be incurred, however, to the extent that operators and providers choose to comply with guidance, and whether upgrades are required.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

This option would involve the inclusion of mandatory prescriptive requirements in the Transport Standards regarding website accessibility.³² Four sub-options were included in the Consultation RIS. Based on consultation feedback and impact analysis, sub-option 3 – websites to meet the current version (2.1) of WCAG AA, has been selected.

Sub-option 3 – Websites to meet the current version (2.1) of WCAG AA

This sub-option would see the Transport Standards amended to require that websites meet WCAG level AA in an up-to-date version (for example, version 2.1). Newer versions of the WCAG contain enhanced requirements which are considered industry best practice. On 11 August 2020, a working draft of WCAG 2.2 was released indicating that work had commenced on a newer version of the document. Sub-option 3 considers “future proofing” any requirements going forward. Furthermore, maintaining the AA requirement aligns with federal, state and territory policy regarding website accessibility.

The Transport Standards would specify that websites that provide information on public transport services must be in compliance with the latest version of WCAG Level AA, as and when they are updated.

³² A transition timeframe would need to be considered in any regulatory option similar to the four-year transition period allowed for following the endorsement of the Australian Government’s transition to WCAG 2.0 in 2009.

Additional guidance material will be provided through the Whole Journey Guide to encourage WCAG 2.1 AAA compliance where possible.

Following feedback through the Consultation RIS, the features for this option have been refined. The major deviation from the Consultation RIS is:

- Sub-option 3 to include additional guidance in the Whole Journey Guide regarding the merit of WCAG 2.1 AAA compliance where possible.

Eliminating discrimination

The regulatory option (sub-option 3) provides the greatest opportunity to reduce discrimination against people with disability.

Mandating prescriptive requirements regarding WCAG 2.1 AA compliance will ensure that essential journey information provided on public transport websites is consistent with international best-practice. WCAG 2.1 AA compliance will reduce barriers to travel currently experienced by people with disability due to an inability to engage with website content, and includes important provisions that cover mobile browsing, reducing discrimination.

Key impacts

- Provides clear, practical requirements for the development of transport websites for the purpose of providing service information that can be accessed by people with disability, while recognising the technical limitations that would occur with mandating WCAG AAA compliance.
- Consistency between jurisdictions and modes of transport, as all transport operators would be required to meet the minimum level of website accessibility.
- Mandating compliance with WCAG 2.1 AA will ensure that the Transport Standards are aligned with industry standards and best practice.
- Sub-option 3 includes provisions to ensure accessibility on mobile devices, ensuring passengers can feel confident when accessing public transport websites in transit.

The cost-benefit analysis for reforms to website accessibility returned a **Benefit-Cost Ratio of 3.9** (detail below).

Impacted parties

Individuals

People with disability will benefit from consistency in the level of accessibility maintained on public transport websites, improving access to information. This may result in increased confidence that when travelling, including when accessing public transport websites on a mobile device. For some people with disability, WCAG AA requirements may not guarantee that all information is accessible. For example, guidance suggesting WCAG AAA compliance where possible may not be applied to dynamic or real-time information contained on maps.

Operators and Providers

Operators and providers will benefit from clarity regarding design requirements to ensure websites are accessible, in alignment with industry best practice. For service providers who do not currently meet WCAG 2.1 AA compliance, costs associated with website audit and upgrade are expected. There may be ongoing costs associated with maintaining this standard. There will be larger burden on smaller operators and providers to comply with regulation, due to having fewer resources available

Indicative Regulatory Impacts per Year

Regulatory Benefits

The Monash University Public Transport Amenity Values report suggest that improved website accessibility has the potential to increase amenity for public transport users by:

- 0.16 in-vehicle time minutes for all modes

The amenity benefit relating to this reform area is related to provision of mobile phone information as a proxy to website accessibility. Website accessibility is recognised to be a fraction of the overall amenity of the website to the public at large so it was considered that the reform area would add a one per cent uplift in amenity. The benefit has been applied to all public transport users given the change applies to all websites across the network.

Given the BCR is greater than 1.0, regulatory reform in this area is estimated to result in a net benefit relative to the status quo.

Regulatory Costs

The table below outlines the regulatory impact of implementing the regulatory option for website accessibility.

Table 21: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$0.7	\$0	\$0	\$0.7
Total over five years, by sector*	\$3.4	\$0	\$0	\$3.4

**The costs in Table 21 above have been determined based on the assumption that this regulatory change would be applied retrospectively over a compliance schedule. The annual total by sector is the average cost per year over the implementation timeframe of five years. Costs may be reduced or avoided if a longer schedule is applied to these requirements or if these requirements are not applied retrospectively.*

Responses to the CBA survey indicated that websites are broadly compliant with WCAG 2.0AA but not WCAG 2.0AAA. As such, the CBA costed upgrading websites to WCAG AAA requirements (the version of AAA was not specified). Through survey responses it was determined that there are no websites that are compliant with the proposed regulations related to WCAG 2.0 AAA (refer to [Appendix B](#)).

It should be noted that the preferred sub-option refers to an upgrade to WCAG 2.1 AA compliance. However, upfront costs associated with an upgrade to this level of compliance are not anticipated to be significantly different to that associated with an upgrade to WCAG 2.0 AAA compliance.

The cost associated with website upgrade was determined to be \$20,600 per website. This figure is the average value quoted in survey responses received. This figure was used across all modes and states and territories as it was assumed that all public transport websites would have similar requirements. There was assumed to be no ongoing incremental cost after the initial audit and upgrade. Ongoing WCAG AAA compliance costs, associated with Auslan translation, for example, were assumed to fall within business as usual costs and therefore no additional ongoing costs were incorporated into the analysis.

5.7.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option is to mandate prescriptive requirements as outlined in **sub-option 3 of the regulatory option** and provide additional guidance in the Whole Journey to encourage WCAG AAA compliance where possible.

It was clear from consultation across all stakeholders that mandating prescriptive requirements regarding website accessibility will contribute to eliminating discrimination against people with a disability, by providing consistency across services and jurisdictions and confidence to users. Mandating WCAG 2.1 AA compliance through sub-option 3 ensures that mobile website access is included in the Transport Standards, while recognising that some elements of WCAG AAA compliance are not practicable for public transport websites. The regulatory option offers operators and providers certainty as to their requirements without the costs being onerous. Whilst non-regulatory guidance may assist operators and providers, it would not resolve the issues with the lack of certainty identified by stakeholders.

The cost-benefit analysis for reforms to website accessibility returned a **Benefit-Cost Ratio of 3.9**.

This option has an estimated net regulatory cost of **\$3.4 million over five years**.

Case Study – Karen has low vision; struggles with cloudy vision, and has partial sight in one eye. Karen has moved house and is having a coffee with a friend. After finishing at the coffee shop she investigates how to take the bus home.

Status Quo – Karen’s experience today

Karen is at a coffee shop with her friend and goes online through her mobile device to view a timetable for the bus to see how she can make it home. However, the presentation and structure of the operator website makes it impossible for Karen to read the web content on her phone. Karen’s friend has already left and Karen feels worried about how she can get home because she can’t read the timetable information. Karen calls a taxi to take her home which costs her much money more than the bus.

Preferred option – Karen’s experience under the proposed regulations

After finishing her coffee with her friend, Karen goes online through her mobile device to view a timetable for the bus to plan her journey home. The bus operator website provides a series of accessibility features suitable for mobile technology, including text and colour contrast requirements, that assist Karen to independently view the web content or use her screen reader so that she could easily pick which route would get her home the fastest. Karen feels confident to navigate to the bus stop on her own and which bus to get on.

5.7.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

The proposed changes to website accessibility will represent a new requirement in the Transport Standards. The assumption for the CBA was that public transport operators and providers would be 100 per cent compliant within five years.

5.8 Communication during Service Disruption

5.8.1 Problem and options

Public transport service disruptions, both planned and unplanned, are challenging for people with disability and transport operators and providers alike. These disruptions include cancellation of services, temporary unavailability of a train line or bus route, weather related disruptions, vehicle breakdowns, replacement of a train with a bus service, or evacuation of a vehicle, depot or station due to an emergency.

A planned disruption is generally well managed with advance notice and alternative arrangements can be put in place and communicated to minimise interference. Unplanned disruptions are generally more challenging as it can be difficult to source and communicate information about the disruption and alternate arrangements in a timely manner. When disruption occurs, people may not be aware of the situation, how to respond, and whether there are alternative arrangements in place to complete their journey.

For people with disability, the risk of miscommunication is heightened, especially when communication channels are limited and do not consider diverse accessibility requirements. This can lead to difficulty navigating alternative travel arrangements or potential journey failure. Likewise, public transport operators and providers are under pressure to quickly understand what has occurred so they can promptly communicate a solution to minimise impact on customers. People with disability noted that the mismanagement of a disruption can serve as a barrier to participating in public transport.

Currently, the Transport Standards provide guidance on access to 'general information', but lack specific guidance on communication with passengers with disability during service disruptions. A lack of coordination of systems across jurisdictions often results in disparate communication systems at the operator level. The availability of information at unstaffed locations also creates challenges, especially when passengers are required to take alternative routes or transport modes. The traditional forms of communication, such as customer service announcements, are not always available.

Table 22: Summary of Options for Communication during Service Disruption

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Guidance provided detailing the communication mechanisms available to operators to communicate during planned and unplanned disruptions to service. Could be delivered in two ways: <ol style="list-style-type: none"> 1. The inclusion of a dedicated chapter in the Whole Journey Guide. 2. Development of a standalone guide.
Regulatory	Include a new performance-based requirement in the Transport Standards detailing responsibilities of operators and providers during planned and unplanned disruptions to service.

5.8.2 Consultation Findings

The importance of effective and efficient communication during service disruption was acknowledged across submissions from all stakeholders. While responses to the preferred option were mixed between the non-regulatory option and regulatory option, common among all submissions was that increased guidance to operators and providers will ensure that people with disability are supported during service disruption.

All submissions from the disability community were supportive of the regulatory option to ensure operators and providers are accountable for their commitments under the Transport Standards to ensure compliance and to provide consistency across services.

A common theme across submissions from the disability community was that if passengers could be confident they will receive timely information and be assured that an accessible means of continuing their journey is being made available, it would greatly encourage them to use the public transport system. Conversely, some responses shared examples of

negative impact that poorly managed and communicated service disruptions can have on people with disability, particularly when communications do not consider accessibility requirements.

There was a traveller [with visual impairment] recently who was on a regional train network and there was a service disruption which meant that some of the stations were covered by bus. But [because the notification was only visual] she waited around on the platform for her connecting service, missed the bus and ended up having an overnight in the middle of nowhere.

Ally, online workshop participant

Several submissions referred to the importance of ensuring information is communicated over multiple accessible channels. For example, communication via electronic means must be accessible and WCAG 2.1AA compliant. Likewise, if communication is provided at a static point, information should be accessible without a mobile device, through mechanisms such as an audio information button or audio announcements. A public transport operator shared an example of the need for information to be provided in diverse formats during service disruption, and not solely through online means:

A great example was the NSW floods we had this year – the information regarding changes to routes was posted on social media platforms such as Facebook and our website, however not everyone in the community has access to these sites.

Leanne, online workshop participant.

Responses from government were mixed regarding preference for regulatory or non-regulatory options. A common theme among responses that preferred the non-regulatory option was that increased guidance to operators and providers will ensure that people with disability are supported during service disruption, and outlined the benefit of creating a guideline to provide practical assistance on how to meet the needs of people with disability while allowing sufficient flexibility to accommodate the variables faced during service disruptions. One submission suggested that guidance should include examples of expected functional outcomes to help to drive positive change. The guidelines may also outline the importance of providing accessible alternative travel options for customers during disruptions. Responses to the Consultation RIS provided varied feedback to whether guidance for communication during service disruption should be included in the Whole Journey Guide or provided as a standalone document. Responses that preferred the standalone guide cited the potential for the Whole Journey Guide to become a cumbersome document to navigate if too much information is included.

These submissions stated a revised guideline document would be beneficial for people with disability, transport providers and government agencies alike. Improvements to the information captured in the guidelines would establish a framework with practical guidance to assist public transport operators and providers to communicate well during planned and unplanned disruptions.

Industry generally preferred the non-regulatory option, citing the need for flexibility to accommodate the dynamic and varied conditions of complex unplanned disruptions. These submissions stated that the Transport Standards should not be too prescriptive, and allow operators and providers to adapt as disruptions occur. All submissions, however, referenced the importance of providing information in a variety of formats. This includes digital, mobile and static modes of communication to communicate disruptions and alternative arrangements. One submission noted that while communication systems are typically the responsibility of operators and providers, communication channels are typically managed by jurisdictional agencies.

A common theme throughout all submissions was the importance and effectiveness associated with on-the-ground staff during disruptions. This notion was common among submissions from the disability community, industry and government.

In many cases the safest, fastest and most effective way of providing information during a service disruption to a person who is blind or has low vision is through direct assistance. Such disruptions are stressful both for passengers and for the transport provider staff.

Vision Australia

The importance of coordinating communication systems with on the ground staff was reiterated by Phillip, a participant in the online consultation workshops:

If we can improve the communication flow back to staff on the ground... that's an alternative resource that we really need to harness better.

Phillip, online workshop participant.

5.8.3 Impact Analysis

Status Quo Option

No change is made to the current Transport Standards and no new guidance materials are developed relating to communication during planned and unplanned disruptions. Part 27 of the Transport Standards currently refers to 'general information' but lacks a definition of what constitutes 'general information' or the potential formats of this information. The current Transport Guidelines also includes advice about communication methods and formats.

Eliminating Discrimination

There is no widespread benefit in maintaining the status quo. People with disability and public transport users will continue to experience the issues outlined in the problem statement.

Key Impacts

- There will be a lost opportunity to improve and strengthen policy and protocols during service disruption, to address the known issues and concerns raised through the consultation process.
- Any discriminatory outcomes faced by people with disability will continue to occur unless they are addressed without the guidance provided.
- There are no additional costs estimated for operators and providers.

Impacted Parties

Individuals

Inconsistency in the provision of accessible information may impact the willingness of people with disability to use public transport during disruptions, and may reduce their confidence to use public transport entirely.

Operators and Providers

Operators and providers will continue to experience a lack of certainty on how to communicate with people with disability during planned or unplanned disruptions.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status option.

Non-regulatory Option

A new set of standalone guidance on communication during service disruption would be developed, to better articulate the performance requirements for communication during service disruption.

The Whole Journey Guide currently includes elements about communicating during disruptions. However, the information is not detailed and is dispersed throughout the document. Sections include information about: temporary works, passenger communications and communication.

Ideally communications systems need to integrate the disruption notification across the whole journey and its parts - journey start to end and back to the start again. In practical terms, this would integrate notification of pathway

disruptions due to council road works, or utility company works, which result in public transport system and interchange disruptions.

Specifically, the guidance material would:

1. include separate sections for communication during planned disruptions and unplanned disruptions
2. detail the different communication mechanisms for disruptions available and the benefits/limitations of each
3. provide examples or case studies from providers where alternative communication solutions have been used in disruptions with success
4. include a matrix to specify communication mechanisms (visual, audio, apps) and the suitability of these methods for different types of disabilities (visual impairment, hearing impairment and cognitive disabilities) and scenarios (planned/unplanned disruptions)
5. provide insights from a range of people with disability (mobility, sensory, intellectual, cognitive, psychosocial conditions/impairments) to highlight common challenges experienced in accessing the transport network and suggested approaches to remove these barriers
6. stipulate that during unplanned disruptions, operators and providers should provide information in a variety of formats as timely and as reasonably practicable. Where information cannot be provided in an accessible format or in a timely manner, information may be provided through direct assistance.

Based on feedback to the Consultation RIS, the development of a new set of standalone guidance is preferred, rather than the development of a new chapter in the Whole Journey Guide.

Following feedback through the Consultation RIS, the features for this option have been refined. The significant deviations from the option included in the Consultation RIS are:

- Preference for the development of a new set of standalone guidance, rather than inclusion of guidance in the Whole Journey Guide.
- Provide additional clarity in guidance regarding best practice during unplanned disruption.

Eliminating Discrimination

The non-regulatory option will assist operators and providers to reduce discriminatory outcomes.

To the extent that guidance is followed, discrimination against people with disability will be reduced by ensuring that during planned and unplanned service disruptions information is provided through a variety of accessible methods and in a timely manner, ensuring people with disability are informed of changes to service or of alternative travel arrangements. An inability to access this information presents as a significant risk for people with disability, and if adopted, the guidance material included in the option will provide additional confidence to passengers.

The level of reduction of discrimination is scalable and cannot be guaranteed due to the discretionary nature of the option.

Key Impacts

- Guidance around communication during planned and unplanned service disruption will provide clarity and consistency, which may lead to reduced customer complaints and higher customer satisfaction levels, as well as a reduced regulatory burden.
- Guidance will outline accessible communication methods to be deployed during service disruption to ensure people with disability remain informed of updates and changes to service provision. If an array of accessible channels is used to communicate service disruption information, the benefit will be realised to a greater extent.
- To the extent that guidance is adopted, consistency of communication methods during service disruption will improve across services, providing clarity and certainty to both individuals and operators and providers. Due to the discretionary nature of this option, it does not provide certainty to people with disability that during service disruption, information will be provided in a variety of accessible formats. Likewise, inconsistencies between jurisdictions and modes of transport regarding the provision of information may remain.
 - A passenger may encounter a scenario where online information only is provided at one station however would be provided the same information in audio or visual formats at a different station.

Impacted Parties

Individuals

People with disability will benefit, to the extent that guidance is adopted, from greater independence and confidence when planning their journey and whilst travelling during service disruption. A lack of consistency across jurisdictions and modes of public transport, where guidance is not adopted, may hinder the confidence of people with disability to travel during service disruption. Poor communication during unplanned disruptions may lead to future avoidance of public transport in preference for more expensive modes of transport.

Operators and Providers

Operators and providers will benefit from the flexibility to provide accessible information in diverse formats in response to unplanned disruptions, and from greater clarity and guidance on their communication during service disruption. Operators and providers will bear the cost of any new procurements or additional staffing deployments required to fulfil accessibility requirements listed in the guidance.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

The regulatory option would include new performance-based requirements in the Transport Standards specifying:

- During planned disruptions, operators and providers must continue to provide information in a variety of formats that specifically communicate details of the disruption and alternate travel options. Information must be provided in a variety of formats with a reasonable amount of notice and communication. Information must not be provided solely through online platforms or channels.
- Where information cannot be provided in an accessible format or in a timely manner, information may be provided through direct assistance.

These requirements do not apply in scenarios where control is transferred to emergency services or another third party, for example a fire evacuation, when communication and operational decisions are not within the control of transport operators and providers.

The following definitions would also be incorporated into the Transport Standards:

- **Planned disruptions:** an event that impacts the normal operation of a public transport service that has been instigated by an operator or provider. For example, routine maintenance, road works, construction, and cleaning.
- **Unplanned disruptions:** an event that impacts the normal operation of a public transport service that has been instigated by factors outside of the reasonable control of an operator or provider. For example, vehicle breakdown, power outage, collision, police incident, fire, weather and natural disasters.

To address the lack of guidance on how to communicate during planned or unplanned disruptions, it is proposed that additional guidance be provided in the Transport Standards Guidelines.

Specifically, the guidance material would:

- include separate sections for communication during planned disruptions and unplanned disruptions
- detail the different communication mechanisms for disruptions available and the benefits/limitations of each
- provide examples or case studies from providers where alternative communication solutions have been used in disruptions with success
- include a matrix to specify communication mechanisms (visual, audio, apps) and the suitability of these methods for different types of disabilities (visual impairment, hearing impairment and cognitive disabilities) and scenarios (planned/unplanned disruptions).

- provide insights from a range of people with disability (mobility, sensory, intellectual, cognitive, psychosocial conditions/impairments) to highlight common challenges experienced in accessing the transport network and suggested approaches to remove these barriers
- stipulate that during unplanned disruptions, operators and providers should provide information in a variety of formats as timely and as reasonably practicable.

Following feedback through the Consultation RIS, the features for this option have been refined. The significant deviations from the Consultation RIS are:

- References to ‘digital platforms or channels’ have been replaced with ‘online platforms or channels’. This change has been made to prevent confusion between digital information screens on board conveyances or at public transport infrastructure with online modes of communication such as websites or mobile applications.
- Performance requirements for operators and providers to provide information in a variety of formats as timely and as reasonably practicable in unplanned disruptions has been moved to guidance.

Eliminating Discrimination

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability.

Regulatory clarity regarding the obligations of operators and providers to provide information during planned and unplanned service disruptions included in this option will ensure that people with disability receive essential information regarding changes to service or alternative travel arrangements. An inability to access this information presents a risk for people with disability. The performance based requirements included in the option will ensure that a variety of accessible channels are used to communicate service disruption information, providing consistency across jurisdictions and confidence for passengers.

Key Impacts

- As it is assumed that all infrastructure and conveyances are compliant, there is no immediate benefit to the proposed reform. The benefit of the proposed reform area is the prevention of potentially discriminatory outcomes in the future. That is, any changes by operators and providers that could result in decreased accessibility in the future is prevented by implementation of the reform.
- Performance based standards that outline the requirements for operators and providers during both planned and unplanned disruptions will provide certainty and confidence for passengers and operators and providers. Additional guidance material will provide best practice advice regarding specific communication methods and practices.
- This option ensures consistency across jurisdictions and modes of transport.
- The design of the option recognises the challenges associated with planned and unplanned disruptions, while providing guidance on how to maintain the provision of accessible information.

Impacted Parties

Individuals

People with disability may benefit from increased confidence that information regarding alternative travel arrangements will be provided in formats that are accessible. Improved communication may help to mitigate anxiety when travelling during disruptions. This may result in greater independence to make decisions regarding public transport travel, and provide certainty that information will be provided in a variety of accessible formats to ensure individuals remain informed with real-time updates regarding service disruption.

Operators and Providers

Operators and providers will benefit from greater clarity regarding obligations for compliance to ensure that passengers with disability remain informed about service disruptions and any alternative travel arrangements. Operators and providers will bear the cost of any new procurements or additional staffing deployments required to fulfil accessibility requirements listed in the guidance.

Indicative Regulatory Impacts per year

Regulatory Benefits

The primary benefit of the proposed reform is the prevention of future dis-benefit, that is, any changes by operators and providers that could result in decreased accessibility in the future is prevented by implementation of the reform. As it is assumed that all operators and providers are compliant, there is no immediate benefit to the proposed reform.

There is no Benefit-Cost Ratio for this option or costs associated with the proposed reforms. CBA survey responses indicated that states and territories currently provide compliant communication during service disruptions.

Regulatory Costs

There are no costs associated with these reforms as CBA survey responses indicated that states and territories currently provide compliant communication during service disruptions.

The table below outlines the regulatory impact of implementing the regulatory option for communication during service disruption.

Table 23: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$0	\$0	\$0	\$0
Total over 10 years, by sector	\$0	\$0	\$0	\$0

5.8.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option is the **regulatory option**.

Responses from all stakeholders highlighted the importance of effective communication during service disruption. Responses from the disability community supported the regulatory option to ensure requirements of the Transport Standards are mandated and consistent across services. The majority of operators and providers supported the non-regulatory option to increase guidance to ensure people with disability are supported during service disruption, citing the complexities of un-planned disruptions as a factor requiring flexibility.

Based on feedback to the Consultation RIS, the regulatory option was amended to recognise the needs of all stakeholders and feedback from operators and providers. The new performance requirements for planned disruptions and direct assistance are included to ensure information is communicated accessibly, while best practice guidance has been provided to accommodate the complexities of unplanned disruptions. Whilst the non-regulatory option would assist operators and providers to address communication during service disruption, the impact analysis found the regulatory approach with amendments, would be the most effective to reduce discrimination against people with disability.

This option has **no estimated regulatory cost**.

Case Study – Rajesh has an intellectual disability and has low vision. Rajesh uses the talkback function on his mobile phone to assist him to use the internet, including public transport websites.

Status Quo – Rajesh’s experience today

Rajesh catches the bus to the shopping centre on Wednesday to get some groceries. This is part of Rajesh’s weekly routine and he knows what time and where the bus picks him up. Rajesh waits at the bus stop to return home but the bus does not arrive. Rajesh feels scared, is upset, and doesn’t know what to do. He waits over two hours for the next bus to arrive. The bus driver can see Rajesh is upset and apologises. He tells Rajesh the previous bus did not arrive due to a breakdown. Rajesh is anxious about catching the bus the following Wednesday.

Preferred option – Rajesh’s experience under the proposed regulations

While Rajesh is waiting for his routine bus to return home from the shopping centre he receives a notification on his mobile phone that the bus has broken down. Rajesh uses the talkback function on his phone which provides information on where he can catch a replacement bus and what time it is leaving. Rajesh feels confident catching the replacement bus home because the bus route information has been provided.

5.8.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

The proposed changes to communication during service disruption will represent a new requirement in the Transport Standards. The assumption for the CBA was that public transport operators and providers would be 100 per cent compliant within five years.

5.9 Gangways

5.9.1 Problem and options

The Transport Standards do not adequately define or identify gangways. Gangways are ramps that connect to ferry pontoons, and they have unique design constraints imposed by the tidal environment. The Transport Standards define gangways as static ramps and walkways, referring to them in Part 6.5 as 'ramps connected to pontoon wharves'. The Transport Standards currently require that gangways have a gradient of at least 1:14 – that is, they may rise no more than 1cm for every 14cm of run.

As a result, the Transport Standards do not recognise the cyclical alteration of gangway and treadplate slope, which makes full compliance with the cited standard impossible and creates several issues:

- Required landings on ramps and walkways are not feasible unless self-levelling landings or ballast-controlled pontoons that rise on request are employed.
- The horizontal extension of handrails that are required at the top and bottom of ramps cannot be maintained as the angle of the gangway changes.
- Treadplates encroach on and recede from tactile ground surface indicators (TGSIs) as the gangway moves across the pontoon during tidal change.

The lack of a specific definition of a gangway results in a tendency to provide gangways without any landing or other means to reduce effort required to transit at low tides. This makes gangways less accessible and less safe than other access paths listed in Section 2.1 due to the effort required to ascend or descend a steep gangway that has no rest points.

Some ambiguity as to what 'standard tide charts' means also exists. AS 3962—2001 Guidelines for design of marinas cite lowest astronomical tide (LAT) as the chart datum from which gangway gradient is usually calculated. The tide data is derived from the Australian National Tide Tables.³³

Table 24 Summary of Options for Gangways

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Additional guidance would be included in The Whole Journey Guide concerning gangways.
Regulatory	The Transport Standards are amended to provide mandatory prescriptive requirements and the Transport Standards Guidelines are updated with performance-based and advisory elements to support the proposed new regulations.

5.9.2 Consultation Findings

Submissions on this topic were limited, owing to the small number of gangways in operation in Australia. Overall the submissions supported removing the regulatory uncertainty and improving clarity around requirements for gangways.

Currently, the Public Transport Standards are weak on the specifics of gangway design for ferries.

Transdev

Submissions from the disability community were supportive of all the regulatory proposals. Submissions agreed that the Transport Standards lack clarity for gangway design, and cited situations where harm has befallen members of the public using gangways.

³³ Australian Hydrographic Office 2020, *Australian National Tide Tables*, accessed on 19 October 2020, <<http://www.hydro.gov.au/prodserv/publications/antt.htm>>

Submissions from governments were generally supportive of the regulatory option however some raised concerns relating to the current requirement to maintain at least a 1:14 gradient for 80 per cent of the tide range and argued that a nationally consistent approach to gangway maximum gradients would not be viable across Australia. Submissions from the disability sector challenged this, citing ferry terminals on the Brisbane River which maintains a gradient of at least 1:14 over the entire tidal range.

It now falls to the operators and providers of Australia's ferry terminals to justify why they will not do what is so manifestly achievable. Gangways that provide 1:14 gradients over 100 per cent of the tide range are affordably achievable in the majority of locations where ferry terminals are located.

Queenslanders with Disability Network

However, submissions overall did not establish a need to change the gradient requirement. The current requirement for meeting the 1:14 gradient over 80 per cent of the tidal range is a feasible minimum across Australia and is a minimum requirement that enables operators and providers to have flexibility in locations which have more challenging conditions. Gangways on the Brisbane River and in Sydney Harbour – where the majority of public transport gangways are located - meet at least 80 per cent gradient over the tidal range.

Some submissions also raised concerns regarding potential safety hazards that might arise from the insertion of a requirement to place TGSIs on the gangway treadplate, citing they may be a slip, trip or fall hazard when located on the end of gangways rather than on pontoons.

Maintenance will increase due to the fact that the edges of TGSIs lift and need to be maintained to prevent tripping hazards for all users.

Transdev

5.9.3 Impact Analysis

Status Quo Option

No change is made to the current Transport Standards text and no new guidance issued.

The Transport Standards currently covers access paths in Part 2 and identifies walkways, ramps and landings in Section 2.1. Gangways are identified as 'ramps connected to pontoon wharves' in Section 6.5 and specifications for ramps are stated in Part 6.1. The Transport Standards Guidelines also define gangways as ramps and acknowledges the effect of 'unusually high' tides.

Eliminating Discrimination

The status quo will not address discriminatory outcomes that are currently occurring as a result of the unclear regulatory requirements. People with disability will continue to experience issues outlined in the problem statement, such as gangways which are challenging to ascend or descend. Operators and providers will continue to have unclear regulatory requirements, decreasing their ability to ensure their services do not discriminate.

Key Impacts

- There is an opportunity cost associated with not better defining the nature, design and performance required for gangways. Qualitatively, this may result in suboptimal outcomes at some locations and a lack of consistency between jurisdictions and projects.
- Lack of certainty on which 'standard tide charts' should be referred to in Section 6.5 may result in unacceptably steep gangways. This diminishes the accessibility of gangways at certain times.
- There are no additional costs associated with this option.

Impacted Parties

Individuals

Ferries which operate using gangways with steep gradients may continue to be inaccessible for many people with disability, resulting in them being unable or unwilling to consider their use for a public transport journey.

Operators and Providers

Operators and providers will continue to have unclear regulatory requirements and may find it more challenging to ensure their infrastructure is accessible.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

A guidance chapter on good practice designs for gangways would be inserted into The Whole Journey Guide to better articulate the performance requirements for gangways

The guidance should include the following advice:

- Gangways should be viewed as access paths that are distinct from static ramps and walkways. In tidal environments gangways vary in gradient according to the tidal cycles.
- A performance aim for gangways is to minimise gradients at all tides in order to make the access path as accessible as possible.
- The chart datum point from which the slope of the gangway 'for at least 80 per cent of the high and low tide levels' is calculated is derived from the Australian Standard: AS 3962-2001 Guidelines for design of marinas, Clause 1.3.15 of AS 3962 defines chart datum as 'the datum used on Australian hydrographic charts and other hydrographic surveys for the specific region'. The source of the tidal ranges derived from chart datum should be the Australian National Tide Tables (AHP 11).
- TGSIs enhance safety and wayfinding for passengers who have vision impairments. The location of TGSIs at the shore or jetty end of the gangway should conform to the ramp requirements of AS 1428.4.1-2009. Installation of domed buttons on the handrails 150 mm from the handrail termination at both ends of the gangway should conform with AS 1428.2-1992, Clause 10.1.1. The movement of the gangway treadplate over the pontoon surface with the rise and fall of the tide prevents compliance with AS1428.4.1. To achieve consistency at the pontoon end of the gangway, designers may consider co-designing a TGSi solution with disability community representatives and local users who have disabilities.
- Self-levelling landings on the gangway or ballast-controlled pontoons that can ameliorate the gangway gradient will be of assistance to these passengers at lower tides.
- In some locations that experience extreme tides, maintaining a 1:14 gangway gradient over 80 per cent of the tide range will be impossible. In these locations, a process of co-design to reach an equivalent access solution should be considered.
- An accessible gangway is one link in the chain of access paths that must be travelled during a public transport journey. A broken link in the chain may prevent a successful journey. Designers should be aware that their work affects entire journeys when dealing with sometimes challenging local constraints.

Based on analysis of submissions to the Consultation RIS and feedback from key stakeholders, the features for this option were refined compared with the option put forward for initial consultation. The major deviation from the Consultation RIS was the amendment of 4. *Tactical ground surface indicators and gangway*. Aspects of this element was identified in submissions as potentially hazardous.

Eliminating Discrimination

The non-regulatory approach will assist operators and providers to reduce discriminatory outcomes, however it will not provide the greatest opportunity to eliminate discrimination as it will not address issues identified with the current regulatory requirements.

The guidance for when gangway gradient requirements may help to ensure operators and providers are able to consistently comply with the Transport Standards benefit those passengers who cannot traverse steep inclines or find them unsafe to travel along. Guidance on TGSIs may improve the accessibility of gangways for people who are blind or have low vision. However, people with disability may continue to experience the negative impacts outlined in the problem statement if guidance is not implemented and the regulatory requirements will remain unclear for operators and providers, potentially leading to reduced compliance and accessibility for people with disability.

Key Impacts

- There will be an opportunity cost to not update the definitions and references in the Transport Standards, which may not maximise the benefit of clarifying the regulatory requirements for operators and providers.
- Where operators and providers follow the guidance provided, people with disability will be reassured that gangways are accessible.
- Operators and providers will have the flexibility to follow the guidance provided or other policies depending on the operational situation the gangway is operating in and the particular requirements of that location.
- As guidance is not mandatory, some gangways may not meet the new guidance requirements, leading to operators and providers procuring gangways which do not meet the accessibility requirements necessary to ensure the gangway is safe and can be used by people with disability. These gangways may be cheaper or have lower ongoing maintenance costs.
- For operators and providers, the design and procurement process for gangways may become more onerous and involve additional up-front costs if they choose to follow the guidance provided.

Impacted Parties

Individuals

People with disability may increase their patronage of ferries where gangways are compliant with the new standards and will be reassured they can access ferries as a public transport option.

Operators and Providers

The guidance provided will enable operators and providers to achieve a best practice solution without increasing the regulatory burden to comply with the Standards. Any operator or provider who construct gangways in accordance with the guidance may incur higher design and procurement costs, but would be assured that gangway accessibility is maximised for passengers who have mobility impairments and provide certainty that gangways meet both the Transport Standards requirements and public expectation.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

The Transport Standards are amended to provide mandatory prescriptive requirements and the Transport Standards Guidelines are updated with performance-based and advisory elements to support the proposed new regulations.

The regulatory option includes the following elements:

1. Gangways to be defined as access paths

Gangways will be deemed access paths in Transport Standards Section 2.1 and referenced in Section 6.5 as 'gangways' rather than pontoon ramps. The definition of access paths in Transport Standards Section 1.9, 'Access path: An access path is a path that permits independent travel for all passengers within public transport premises, infrastructure or conveyances', will remain unchanged.

2. Gangway definition

Gangways will be defined based on AS 3962-2001 Guidelines for design of marinas, Clause 1.3.25 and Figure 1.8: 'Gangway: A structure that provides pedestrian access between a fixed jetty or shore and a floating structure'. This definition will have an added qualifier: 'In tidal environments gangways vary in gradient according to the tidal cycles'.

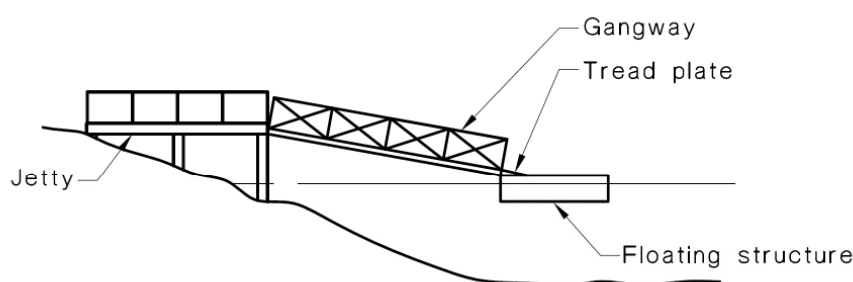


FIGURE 1.8 GANGWAY

Figure 1: Gangway Design

3. Gangway maximum gradients

Providers and operators must ensure that gangways maintain a 1:14 gradient for at least 80 per cent of the high and low tide levels.

4. Nationally consistent chart datum and tide tables

The chart datum point from which the slope of the gangway 'for at least 80 per cent of the high and low tide levels' is calculated will be derived from AS 3962-2001 Guidelines for design of marinas, clause 1.3.15: 'Chart datum (CD), The datum used on Australian hydrographic charts and other hydrographic surveys for the specific region.

The source of the tidal ranges derived from chart datum will be the Australian National Tide Tables (AHP 11).

The Transport Standards Guidelines would contain the following advice:

1. Gangway definition explanation

Gangways are access paths that are distinct from static ramps and walkways. In tidal environments gangways vary in gradient according to the tidal cycles. This cyclical variation of gradient introduces problems for designers as the specifications for ramps and walkways differ according to access path gradient.

Based on the definition of gangways in AS 3962-2001 Guidelines for design of marinas Clause 1.3.25, a gangway should be regarded as a structure that provides pedestrian access between a fixed jetty or shore and a floating structure.

2. Minimisation of gangway gradients

Gangway design must minimise gradients at all tides in order to make the access path as accessible as possible. The specification of a 1:14 gangway gradient 'for at least 80 per cent of the high and low tide levels' is offered as a concession for site specific technical difficulties rather than defining an optimal performance outcome.

3. Nationally consistent chart datum and tide tables

Ensuring nationally consistent outcomes for gangway gradients requires an agreed chart datum point. The chart datum point from which the slope of the gangway 'for at least 80 per cent of the high and low tide levels' is calculated is derived from AS 3962-2001 Guidelines for design of marinas, clause 1.3.15. Drawing on an established industry standard introduces no onerous requirements and permits a 'business as usual' approach to gangway gradient.

The source of the tidal ranges derived from chart datum is the Australian National Tide Tables (AHP 11). These are the nationally consulted tables and introduce no new or unreasonable requirements to the Transport Standards.

4. Accessibility enhancements for lower tides

At some lower tide levels, particularly at the lowest 20 per cent of the tidal range, gangways may be unavoidably steep and so challenge some passengers who have mobility impairments. Self-levelling landings on the gangway or ballast-controlled pontoons that can ameliorate the gangway gradient will be of assistance to these passengers at lower tides.

5. Gangways affected by extreme tidal regimes

In some locations that experience extreme tides, maintaining a 1:14 gangway gradient over 80 per cent of the tide range will be impossible. In these locations a process of co-design to reach an equivalent access solution should be considered.

6. Continuous accessible journey

An accessible gangway is one link in the chain of access paths that must be travelled during a public transport journey. A broken link in the chain may prevent a successful journey. Designers should be aware that their work affects entire journeys when dealing with sometimes challenging local constraints.

Based on analysis of the submissions to the Consultation RIS and feedback from key stakeholders, the features for this option were refined compared with the option put forward for initial consultation. The deviation from the Consultation RIS was the removal of the requirement for TGSIs associated with gangways. This requirement was identified in submissions as being potentially hazardous. The sub-option to maintain a 1:14 gradient across 80 per cent of the tidal range was selected, as the consultation process did not indicate that a 100 per cent requirement was necessary as a mandatory minimum to ensure discrimination was eliminated as far as possible.

Eliminating Discrimination

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability.

The regulatory amendments will ensure gangways meet the accessibility requirements necessary to ensure they can be used by people with disability. Passengers who cannot traverse steep inclines or find them unsafe to travel along will benefit from reducing or eliminating steep gangway gradients. The amendments will assist operators and providers to meet these requirements by providing clarity and certainty with what they need to comply with. The additional guidance for gangway accessibility enhancements may further encourage operators and providers to ensure their services are as accessible as possible throughout the entire tidal range.

Key Impacts

- The new regulatory requirements, such as references to tide charts and a definition of a gangway, will increase clarity and information regarding gangways for operators and providers, reducing regulatory burden.
- The new regulatory requirements will improve access for people with disability by minimising gradients and confirming a gangway is an access path.
- Where operators and providers follow the additional guidance provided, people with disability will have greater access to pontoon wharves and ferries.
- Operators and providers will have the flexibility to follow the guidance provided or other policies depending on the operational situation the gangway is operating in and the particular requirements of that location.
- For operators and providers, the design and construction process may be more onerous with possible extra costs incurred upfront for the design and procurement of new gangways.

- No additional maintenance costs are expected above typical maintenance costs for a gangway. Some gangway designs may have additional maintenance costs depending on any additional features to ensure a gradient of 1:14.

The cost-benefit analysis for reforms to gangways returned a **Benefit-Cost Ratio of 1.6** (detail below).

Impacted Parties

Individuals

People with disability will have greater and more consistent access to pontoon wharves, enabling them to undertake public transport journeys by ferry, resulting in increased participation in the workforce and community. There may be fewer incidents of falls or slips associated with steep gangways, and people with disability may be able to access gangways independently without direct assistance.

Operators and Providers

The expanded section on gangways will result in operators and providers having clarity and certainty for their requirements relating to gangways. Operators and providers will have a clear definition of gangways, and a clear measurement for the tidal range. Gangways may need to be upgraded over time due to the gradient requirement.

Indicative Regulatory Impacts per year

The regulatory impacts and BCR calculations are based on the proposed regulatory option which stipulates that providers and operators must ensure that gangways maintain a 1:14 gradient over the entire range of the high and low tide levels. The proposed preferred option stipulates that gradient requirements must be met for at least 80 per cent of the time. As this is the current gradient requirement, an assumption used to inform the CBA was that all gangways would currently meet this gradient requirement. As such, the **regulatory costs and benefits associated with this reform area are likely to be less.**

Regulatory Benefits

The Monash University Public Transport Amenity Values report suggests that provision of gangways (measured as step free access) has the potential to increase amenity for public transport users by:

- 0.22 in-vehicle time minutes for ferries

The proposal to meet the 100 per cent gradient requirement assumes an amenity uplift of 20 per cent and a reduction of three per cent in slips, trips and falls. The benefits have been adjusted to recognise that 50 per cent of existing gangways are compliant with the proposed reform.

The benefit for an 80 per cent requirement would be limited, as the additional time in the day for which the gradient is meeting the 1:14 requirement would be minor.

Given the BCR is greater than 1.0, regulatory reform in this area is estimated to result in a net benefit relative to the status quo.

Regulatory Costs

The table below outlines the regulatory impact of implementing the regulatory option for gangways. As maintenance costs are not expected to increase, the only cost to operators and providers will be the initial cost to upgrade or replace a gangway.

Table 25: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$0.1	\$0	\$0	\$0.1
Total over 20 years, by sector*	\$1.8	\$0	\$0	\$1.8

**The costs in Table 25 above have been determined based on the assumption that this regulatory change would be applied retrospectively over a compliance schedule. The annual total by sector is the average cost per year over the implementation timeframe of 20 years. Costs may be reduced or avoided if a longer schedule is applied to these requirements or if these requirements are not applied retrospectively.*

From survey responses to the CBA and publicly available data, it was assessed that approximately 50 per cent of public transport gangways are either compliant with the proposed reform or would be upgraded in the next five years to be compliant. That is, approximately 50 per cent would be non-compliant with the proposed reform (refer to [Appendix B](#)). An assumption used to inform the CBA was that no incremental maintenance costs relative to a non-compliant gangway would be incurred. As such, the cost presented is associated with the installation of a compliant gangway.

The cost of a compliant gangway is estimated as \$35,640, and includes materials and installation. This figure was extrapolated from a published price list for a 6m gangway from a gangway manufacturer and installer. The total cost of this option will depend on the geographic nature and average age of gangways across Australia. Costs may be minimised where an existing gangway reaches the end of its lifecycle and can be replaced by a new compliant gangway.

As this cost is based on meeting gradient requirements 100 per cent of the time, the cost associated with the preferred option may be less. However, where currently each jurisdiction may have a different definition of the tidal range, the reform would standardise the definition of a tidal range to the chart datum, which may require some modifications to existing gangways. Depending on the magnitude of the change required, this could represent a significant cost with an upgrade cost per gangway similar to that represented above.

5.9.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option is the **regulatory option**.

Consultation found there is a lack of regulatory clarity for operators and providers regarding gangways, and people with disability are negatively impacted by the current state of gangway design. The impact analysis indicated a low cost and strong benefits to the regulatory option, which would improve regulatory clarity and accessibility. Whilst guidance may assist operators and providers to improve regulatory clarity and accessibility, it would not resolve the issues with the existing regulation identified by stakeholders.

The cost-benefit analysis for reforms to gangways returned a **Benefit-Cost Ratio of 1.6**.

This option has an estimated net regulatory cost of **\$1.8 million over 20 years**. However, as the preferred option stipulates meeting gradient requirements 80 per cent of the time (rather than over the entire range of the high and low tide levels), **the cost may be less**.

Case study – Minh has an ambulant disability, meaning he can walk without a requiring a mobility aid, and wants to take a ferry to go to a day at the cricket.

Status Quo – Minh’s experience today

Minh takes the ferry as part of his public transport journey to travel to the cricket. Minh arrives when the tide is low and finds the ramp between the shore and the ferry pontoon is difficult to navigate as it is too steep and does not permit independent travel. Some passengers are stopping to watch him - making him reluctant to use the ferry on his return trip or to go to the cricket again.

Preferred option – Minh’s experience under the new requirements.

Minh takes the ferry and finds the gangway between the shore and the ferry pontoon is independently accessible. Minh can navigate up and down the gangway at low tide without difficulty as the gradient is not too steep and/or there are flat landings along the gangway where he can rest and he feels confident and comfortable taking the ferry to the cricket in the future.

5.9.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

For gangways, the assumption for the CBA was that public transport operators and providers would be 25 per cent compliant at five years, 55 per cent compliant at 10 years, 90 per cent compliant at 15 years and 100 per cent compliant at 20 years as per Schedule 1 (ramps).

5.10 Assistance Animal Toileting Facilities

5.10.1 Problem and options

The DDA acknowledges that assistance animals can be used by people to alleviate the effects of their disability. The DDA defines an assistance animal as a dog or other animal that is accredited under a law of a State or Territory or by a prescribed training organisation, or an animal trained to assist a person with a disability to alleviate the effects of that disability and also meets the standards of hygiene and behaviour that are appropriate for an animal in a public place.³⁴

Whilst the use of assistance animals can remove some barriers for people with disability, the lack of appropriate and conveniently located sites for these animals to be toileted poses a barrier that can deter or prevent travel on public transport. Also, the individuals utilising assistance animals will often need to venture away from their intended path of travel to locate an appropriate toileting area for their animal.

Anecdotal evidence suggests that the number of assistance animals in Australia is growing due to the extent to which they enable people with disability to actively engage in social and economic activities. The National Disability Insurance Scheme (NDIS) is also providing funding for some types of assistance animals as being reasonable and necessary support for people in the scheme. This is also contributing to the increase use of these animals.

Many footpaths do not allow enough safe space for assistance animal toileting areas. Similarly, with infrastructure on roadways there are often challenges with the topography of roadways and the very limited availability of space. Generally, where there are compliant ramps, access paths, priority seating, waiting and boarding areas, there may not be adequate residual space for an assistance animal toileting area. If there are situations where specific infrastructure would benefit from having assistance animal toileting facilities, but will be difficult to achieve, then equivalent access or consultation with people with disability can still be used to find an appropriate solution for that particular situation.

Careful consideration would also need to be given to the location of any future assistance animal toileting areas to ensure they do not place the handler or animal at any greater risk when accessing the facility. The Transport Standards do not provide for assistance animal toileting areas, so there is an opportunity to address this gap.

Table 26: Summary of Options for Assistance Animal Toileting Facilities

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Additional guidance would be included in The Whole Journey Guide concerning assistance animal toileting facilities.
Regulatory	The Transport Standards are amended to provide mandatory prescriptive requirements and the Transport Standards Guidelines are updated with performance-based and advisory elements to support the proposed new regulations.

5.10.2 Consultation Findings

Submissions from the disability community reported that suitable locations to toilet assistance animals were important when commuting long distances, and reported there are not enough suitable places to toilet assistance animals, nor are there resources to identify locations suitable to toilet an assistance animal. This results in a disincentive to use public transport and in particular, the large facilities and nodes which are least likely to have grassy areas nearby. People with guide dogs may have to spend time finding a suitable area, negatively impacting their public transport journey.

I miss connecting services to do right by my dog often or I try hold on myself so my dog gets to pee and not me.

Anonymous Survey

³⁴ Section 9(2), *Disability Discrimination Act 1992*

The consultation process heard that people with assistance animals must plan their journeys around available toileting areas and it can be challenging and stressful to deviate from routes they frequently use. People can become lost or disoriented while searching for a suitable toileting area in a location they are not familiar with. Locations with suitable toileting areas may not be the most efficient route, increasing travel times and decreasing the amenity of the public transport journey. For these reasons, it is important that any assistance animal toileting facility or area must have a well-defined access path to ensure they can be used safely and information on their whereabouts should be accessible.

Travellers familiar with particular routes will know where the grassed areas are located, away from their regular travel patterns they may not be aware of the location of a grassy area in which it is permissible to toilet an assistance animal.

Queenslanders with Disability Network

Consultation also heard that existing toileting facilities are not maintained well, resulting in unpleasant and unhygienic experiences for users. This may result in people opting not to use a provided facility.

Submissions from government varied on the need for assistance animal toileting facilities, with some agreeing that they would be beneficial, and others reporting a lack of feedback supporting the need to construct them. Governments did not support mandating the requirements in the regulatory option. They reported many public transport sites have constraints such as limited space on existing stations, property boundaries, lost revenue from leasing retail space and heritage concerns that may make it impractical or impossible to provide assistance animal toileting facilities.

Transport interchanges, where the majority of these facilities would be beneficial, have existing site constraints making it impractical or impossible in some cases to provide these facilities

NSW Government

Submissions from industry did not support the regulatory option, in particular arguing that assistance animal toileting facilities would not be a 'minimum requirement' to eliminate discrimination from public transport. Submissions also argued the proposed regulatory requirements are not clearly defined. Terms used such as 'conveniently located', 'close proximity' and 'reasonable distribution' do not allow for certain application and become challenging to adopt. Submissions from industry noted the regulatory option does not make provisions for situations where a government does not oversee the operation of the entire multimodal transport network, citing these regulations are not suitable in situations where train, bus and light rail networks are operated independently. Further, the guidance and regulation did not note the different operational requirements of those networks. Submissions did not indicate opposition to most of the specific requirements for toileting facilities being provided as guidance.

The BAN (Bus Australia Network) would support the non-regulatory option as it provides information and standards that can be referenced but still allows flexibility to allow operators to provide best outcomes.

Bus Industry Confederation

Submissions from industry and government broadly voiced support for the non-regulatory option. Guidance would offer operators and providers flexibility to introduce facilities and other suitable toileting areas within the operational constraints of their network. Guidance would also inform operators and providers on the importance and the cost of providing toileting facilities. Guidance would encourage operators and providers to audit their networks to identify locations which do not currently have access to suitable toileting areas.

A non-regulatory approach provides the opportunity to work with the disability sector and gather data to ensure that facilities can be delivered where most appropriate.

NSW Government

5.10.3 Impact Analysis

Status Quo Option

This option maintains the status quo with no changes to the current Transport Standards text and no new guidance material issued, including the Transport Standards Guidelines. Currently, there are no provisions for assistance animal toileting areas in the Transport Standards or guidance.

Eliminating Discrimination

The status quo will not address discriminatory outcomes that are currently occurring. People with disability will continue to experience issues outlined in the problem statement. Operators and providers will continue to lack guidance on assistance animal toileting facilities, decreasing their ability to ensure their services do not discriminate against people who rely on assistance animals.

Key Impacts

- There is an opportunity cost to not provide any further guidance or regulatory requirements for assistance animal toileting facilities. This may result in suboptimal outcomes at some locations and a lack of consistency between jurisdictions and transport precincts.
- Operators and providers will not be encouraged to provide facilities and guidance on features of toileting facilities would not be provided.
- There are no additional costs associated with this option.

Impacted Parties

Individuals

People with disability will continue to be impacted by a lack of appropriate assistance animal toileting facilities, particularly in major transit hubs, reducing their ability and confidence to use public transport.

Operators and Providers

Operators and providers will lack guidance on assistance animal toileting facilities, potentially increasing the cost to develop and procure facilities, or decreasing the amenity of facilities they provide. Operators and providers may also lack encouragement to implement best practice solutions on their public transport networks.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status option.

Non-regulatory Option

The non-regulatory option would include a dedicated Section on assistance animal toileting areas in The Whole Journey Guide. This would expand on the 'beyond compliance' case study concerning Brisbane Airport in the current version of the guide. The guidance would include:

- Acknowledgement that transport operators and providers should consider the inclusion of conveniently located, safe and appropriate assistance animal toileting areas, particularly when designing new networks.
- Transport operators and providers need to ensure there is a reasonable distribution of assistance animal toileting areas across the public transport network.
- The installation of assistance animal toileting areas at public transport infrastructure should include the following:
 - A fenced or enclosed area that has an accessible and self-closing entrance (e.g. pool fencing with a self-closing gate or a room with a self-closing door).

- The enclosed area is no less than 4 m² that is level and free of any hazards and obstacles.
 - Have more than one ground surface type within the area (e.g. outdoor areas- synthetic grass, natural grass, bark chips, gravel and concrete; indoor areas – synthetic grass and concrete) whereby any ground surface used has a coverage of at least 25 per cent of the area.
 - Have appropriate shading from direct sunlight to ensure a ground surface temperature that is always safe for animals.
 - Provide supply of animal toilet bags, a rubbish bin and water supply.
 - Provide consistency of layouts across the public transport network, where practicable.
 - Include wayfinding signage in accessible formats to highlight the location of the area and the features within the area.
 - Ensure there is a maintenance regime set up by operators and providers to regularly clean and maintain the area to ensure there are no hazards for animals and handlers.
- Allow operators and providers to rely on suitable assistance animal toileting areas in public areas if they are within proximity of public transport services and include the following features:
 - Have a surface of either grass, bark, dirt, gravel or other similar surfaces.
 - Have a clear space no less than 4 m² that is reasonably level and free of any hazards and obstacles.
 - Have a public rubbish bin within proximity of the area for the disposal of animal waste.
 - In determining the suitability of assistance animal toileting areas, operators and providers should conduct targeted stakeholder consultation, including with people with disability who use assistance animals, to assess the suitability of public transport premises/infrastructure or nearby public areas. In assessing public transport premises/infrastructure locations for this purpose it should be recognised that some existing sites will have constraints due to limited space, property boundaries, heritage restrictions or topographical features that may make it impracticable or unsafe to provide an assistance animal toileting area. There may even be some cases where new sites may be difficult to implement assistance animal toileting areas, but these would be expected to be less frequent than existing sites. In any case, transport operators and providers may consider that an unjustifiable hardship defence to any discrimination complaint could be appropriate if there are no suitable locations in nearby public areas.
 - Public transport operators or providers should provide information that details the location of the closest assistance animal toileting area to public transport services to customers in accessible formats. This includes how to locate facilities at public transport premises/infrastructure and facilities in public areas outside the public transport environment.

Guidance would also encourage operators and providers to provide information to the public on the use and location of assistance animal toileting facilities on their networks. This information should link in with broader publication of accessibility features to assist whole-of-journey planning.

Eliminating Discrimination

The non-regulatory option will provide a satisfactory opportunity to reduce discrimination against people with disability. Operators and providers have no guidance and limited data on assistance animal toileting facilities. The guidance for how assistance animal toileting facilities should be located and what features they should contain will assist operators and providers to provide these facilities and reduce discriminatory outcomes throughout their networks.

Travellers with assistance animals may find their ability to access public transport increases with greater access to locations where they can toilet their animals. The non-regulatory option will not impose unfeasible requirements that may not be widely adopted and will not impose high auditing costs that may detract from other processes to improve

accessibility. Instead guidance will encourage best practice on networks with and without assistance animal toileting facilities, as well as new networks.

Key Impacts

- The guidance provided will assist and encourage operators and providers to build assistance animal toileting facilities that will be accessible and usable for people with assistance animals.
- Operators and providers will have flexibility to identify gaps where facilities are required and how these gaps should be addressed. This may not remove gaps on public transport networks where there are no suitable locations to toilet an assistance animal.
- There is an opportunity cost to not provide any regulatory requirements for assistance animal toileting facilities.
- Facilities provided may not meet the guidance provided, leading to suboptimal outcomes for people with assistance animals, and may result in facilities not being used to their fullest extent.
- Operators and providers will incur costs to provide assistance animal toileting facilities as far as they adopt the provided guidance.

Impacted Parties

Individuals

Individuals may have improved confidence to travel along networks they are not familiar with. People with assistance animals will be less likely to encounter a situation where they are unable to find an appropriate site to toilet their animal, or where they become lost or disoriented in the process of searching for one. Impacts to individuals will be limited based on how many facilities are built as a result of the guidance provided.

Operators and Providers

Operators and providers will be encouraged to build assistance animal toileting facilities that will be accessible and usable for people with assistance animals and to analyse their networks for gaps where there are no appropriate locations to toilet assistance animals. If the guidance is followed, this will create a burden, however once these are identified and addressed, the ongoing cost will be low. As the regulations do not establish exactly how many facilities should be built, the impacts to operators and providers may be limited.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

The Transport Standards are amended to provide requirements for assistance animal toileting areas to ensure best practice for accessibility. The Transport Standards Guidelines are updated to reflect the regulatory change and provide further advice.

The Transport Standards to include the following:

- Public transport operators and providers must provide conveniently located, safe and appropriate assistance animal toileting areas at a public transport site if a suitable assistance animal toileting area in a public space is not available in close proximity.
- Public transport operators and providers must ensure there is a reasonable distribution of assistance animal toileting areas across the public transport network, noting that it is not expected that such facilities will be located at all locations across the network. Where there are significant gaps in the location of assistance animal toileting areas to public transport services, the transport operator or provider must install these facilities in appropriate locations to ensure reasonable coverage.
- The installation of assistance animal toileting areas at public transport premises or infrastructure must include the following:

- A fenced or enclosed area that has an accessible and self-closing entrance (pool fencing with a self-closing gate or a room with a self-closing door).
 - The enclosed area is no less than 4 m² that is level and free of any hazards and obstacles.
 - Have more than one ground surface type within the area (for example, outdoor areas - synthetic grass, natural grass, bark chips, gravel and concrete; indoor areas - synthetic grass and concrete) whereby any ground surface used has a coverage of at least 25 per cent of the area.
 - Have appropriate shading from direct sunlight to ensure a ground surface temperature that is always safe for animals.
 - Provide supply of animal toilet bags, a rubbish bin and water supply.
 - As far as practicable, provide consistency of their layouts across the public transport network.
 - Include wayfinding signage in accessible formats to highlight the location of the area and the features within the area.
 - Ensure there is a maintenance regime set up by operators and providers to regularly clean and maintain the area to ensure there are no hazards for animals.
- Suitable assistance animal toileting areas in public spaces, if they are within close proximity of public transport services, must have the following features:
 - A surface of either grass, bark, dirt, gravel or other similar surfaces.
 - A clear space no less than 4 m² that is reasonably level and free of any hazards and obstacles.
 - A public rubbish bin within proximity of the area for the disposal of animal waste matter. A reasonable distance to be considered would be no more than 100 metres.
 - In determining the suitability of the distribution of assistance animal toileting areas, operators and providers must conduct targeted stakeholder consultation, including with people with disability who use assistance animals, to assess the suitability of public transport premises/infrastructure or nearby public areas.
 - Transport operators and providers must consider providing information that details the location of the closest assistance animal toileting area to public transport services to customers in accessible formats. This includes how to locate facilities at public transport premises/infrastructure and facilities in public areas outside the public transport environment.

The provision of an assistance animal toileting area within a transport location will be supported by guidance to be provided in the Transport Standards Guidelines. The guidance would include the following:

- In assessing public transport premises/infrastructure locations for the purpose of determining the suitability of distribution of assistance animal toileting areas, it should be recognised that some existing sites will have constraints due to limited space, property boundaries, heritage restrictions or topographical features that may make it impracticable or unsafe to provide an assistance animal toileting area. There may even be some cases where new sites may be difficult to implement assistance animal toileting areas, but these would be expected to be less frequent than existing sites. In any case, transport operators and providers may consider that an unjustifiable hardship defence to any discrimination complaint could be appropriate if there are also no suitable locations in nearby public areas.

Eliminating Discrimination

The regulatory approach will reduce discriminatory outcomes but may be unfeasible, impractical to comply with or unclear, and may not result in operators and providers complying with the requirements to the fullest extent possible. As a result, the proposed regulatory amendment is not a satisfactory opportunity to eliminate discrimination.

The regulatory requirements may see assistance animal toileting facilities built in appropriate locations, with accessibility features necessary to ensure they can be used by people who have assistance animals. Where these regulations are adopted this would improve the accessibility of the public transport network as a whole. However, as the regulations do not provide clear requirements for operators and providers, they may not result in meaningful change and compliance will be challenging to measure.

Key Impacts

- Operators and providers will build assistance animal toileting facilities that will be accessible and usable for people with assistance animals in locations where these facilities are needed, improving the accessibility of public transport network for people who use assistance animals.
- Operators and providers will have some flexibility to identify gaps where facilities are required and how these gaps should be addressed.
- Regulations may be challenging to interpret and implement.
- Operators and providers may not feel confident to provide facilities if they are unsure whether they are compliant or not.
- The provision of assistance animal toileting facilities will have a high cost for operators and providers of public transport. A cost of approximately \$30,000 per facility has been cited in submissions.
- Capital costs associated with the establishment of these areas will vary depending on the specific location.
- Ongoing maintenance costs may increase to ensure the facility remains fit for use, however these could be expected to form part of the ongoing maintenance costs of the facility as a whole.
- There may be lost revenue from any retail floor space that is replaced by a facility.

Impacted Parties

Individuals

People will be confident facilities provided will meet the above requirements, and will be appropriate and safe to use. Any facilities provided as a result of the regulations will improve the accessibility of public transport network for people who use assistance animals.

Where facilities are provided it will improve people's confidence to travel along networks they are not familiar with. People with assistance animals will be less likely to encounter a situation where they are unable to find an appropriate site to toilet their animal, or where they become lost or disoriented in the process of searching for one.

As the regulations do not establish exactly how many facilities should be built, the impacts to individuals may be limited.

Operators and Providers

Operators and providers will be enabled to build assistance animal toileting facilities that will be accessible and usable for people with assistance animals. The requirements to analyse their networks for gaps where there are no appropriate locations to toilet assistance animals will be burdensome, however once these are identified and addressed, the ongoing cost will be low. Where transport networks are expanded, considerations for toileting facilities will need to be made. As the regulations do not establish exactly how many facilities should be built, the impacts to operators and providers may be limited.

Indicative Regulatory Impacts per year

Regulatory Benefits

The proposed reform is expected to lead to two main beneficial outcomes:

- A review of existing infrastructure to identify viable toileting areas around public transport sites, possibly leading to enhance provision of information in this regard.
- Future consideration of toileting areas in station design.

There is no Benefit-Cost Ratio for this option as assumptions used to inform the CBA could not identify a regulatory cost with implementation of this reform.

Regulatory Costs

The cost-benefit analysis was unable to quantify the cost of regulation, as the exact number of assistance animal toileting facilities that would be required is unclear. Consultation findings supported this, as industry indicated they would be unable to determine the number of appropriate toileting areas and required number of facilities. The regulatory option may lead to dozens, hundreds, or perhaps no new facilities being installed, depending on the current number of appropriate areas and how the operator or provider interprets the proposed requirement. As such, the average cost to business cannot be determined.

Table 27: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$0	\$0	\$0	\$0
Total over 10 years, by sector	\$0	\$0	\$0	\$0

5.10.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option is the **non-regulatory option**.

Consultation found people with disability are negatively impacted by a lack of appropriate areas to toilet animals, indicating guidance is necessary to encourage operators and providers to consider this issue and provide facilities where necessary. The proposed regulatory option may impose a high cost on operators and providers, but would not offer certainty that they were compliant or when and where they would be required to build assistance animal toileting facilities.

The non-regulatory option offers flexibility to audit networks to identify locations best suited for the construction of toileting facilities and build these facilities where practicable and take their construction into account when expanding networks. As operators and providers have begun to construct assistance animal toileting facilities, regulation may not be required to address the problem to be solved.

This option has **no estimated regulatory cost**.

Case Study – Robert has an assistance dog. Robert takes the train to an appointment at a location he has not been to before. At the destination location his assistance dog requires an animal toileting facility.

Status Quo – Robert’s experience today

Robert catches a train to his appointment. When Robert gets off the train his assistance dog needs a toileting facility, however the precinct lacks an appropriate space. Robert has to seek assistance from a local business and walk some distance to find an appropriate council park for his dog. Robert is frustrated at the lack of facilities available for his dog and feels anxious and flustered after arriving late for his appointment.

Preferred option – Robert’s experience if the guidance is enacted

Robert catches a train to his appointment. At his destination Robert’s assistance dog needs a toileting facility. Robert is relieved that he can easily identify the nearest animal toileting facilities on signs at the train stop. Robert and his assistance dog take a short walk to a designated animal toileting facility. Robert feels relaxed when he arrives at his appointment on time also knowing that his assistance dog will be comfortable.

5.10.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

For assistance animal toileting facilities, the assumption for the CBA was that public transport operators and providers would be 25 per cent compliant at five years, 55 per cent compliant at 10 years, 90 per cent compliant at 15 years and 100 per cent compliant at 20 years.

5.11 Emergency Egress

5.11.1 Problem and options

An emergency has been defined by the NSW Government as ‘an actual or imminent event that endangers or threatens life, property or the environment and calls for a significant and coordinated response’³⁵.

Emergency egress requirements for building premises are covered under the Premises Standards. However, the Premises Standards do not make provision for associated safety and technical issues relating to public transport infrastructure. The Transport Standards make no provisions for emergency egress from public transport infrastructure, premises or conveyances, and therefore, the provision of safe emergency egress is not well understood by all operators, designers and people with disability.

Infrastructure that involves locations where movement of passengers may be restricted via fencing or environmental factors that would impact passengers’ ability to safely leave the location, would require additional emergency egress consideration. Public transport infrastructure that may involve local government or private property, may also introduce additional complexities for design and construction, and therefore impact emergency planning in relation to infrastructure.

Table 28: Summary of Options for Emergency Egress

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Additional guidance would be included in The Whole Journey Guide concerning emergency egress from public transport infrastructure.
Regulatory	A new section would be inserted into the Transport Standards which specifies performance requirements for the provision of emergency egress requirements for public transport infrastructure. This would be supported by further information in the Transport Standards Guidelines.

5.11.2 Consultation Findings

Many submissions provided comments beyond the scope or intent of this proposed reform, for example related to buildings or lifts (that fall under the Premises Standards).

Of the submissions that were within scope, there was no clear support for regulatory change, with many raising potential barriers to implementation. These barriers included:

- **Topographical/geographical barriers:** the location of some stops mean that changes to the stops would require extensive work, such as removing or altering lanes of traffic. Another concern was flow-on effects such as impacts on existing drainage and water flow that could lead to flash flooding.
- **Ownership of assets/land:** many stops are on land owned by local councils or owned by multiple owners. This would place compliance burden and costs on local governments.
- **Compliance practicalities:** built environment constraints can impede egress. For example, some stops merge seamlessly with surrounding footpaths, therefore providing emergency egress routes. Not all locations, however, have this ability.

A key theme across submissions from the disability community, governments and industry was the need to co-design with the disability community.

³⁵ Crownland NSW Government, Emergency Management, Australia, Available <https://reservemanager.crownland.nsw.gov.au/using-crown-reserves/emergency-management> accessed 26/07/2021

Submissions advised that two accessible emergency egress routes at each stop should be seen as best practice and in many cases was already a reality. They also advised that there are circumstances where two accessible emergency egress routes are not reasonably achievable, and mandating this through the regulatory option would create unnecessary burden. For this reason, a common theme among submissions was that the non-regulatory option provides guidance and standards for best practice to inform governments and public transport operators, while recognising the diverse requirements of each location.

As previously noted, emergency egress requirements for building premises are covered under the Premises Standards. Some government and industry submissions noted that emergency egress is already sufficiently considered through various emergency management guides, procedural manuals and fire evacuation protocols, and that as a result of this existing coverage further regulation was seen as unnecessary.

5.11.3 Impact Analysis

Status Quo Option

The Transport Standards do not currently reference provisions for emergency egress and this issue will continue to go unaddressed for public transport infrastructure not covered under the Premises Standards.

Eliminating Discrimination

The status quo will not address discriminatory outcomes if a passenger with disability is unable to safely egress from public transport infrastructure if accessible egress routes are not already available.

However, given the majority of situations would be covered by other requirements such as the Premises Standards or emergency management protocols, regulatory change in this reform area is likely to have limited impact on discrimination outcomes.

Key Impacts

- Operators and providers will continue to have no clear regulatory direction as to how to ensure people with disability safely egress public transport infrastructure during emergencies.
- Emergency egress from infrastructure will continue to be delivered in an ad-hoc manner. People with disability will continue to not be provided clear direction on how to egress public transport infrastructure through accessible means, possibly increasing the risk of injury or death.
- The opportunity cost is that there will be no direction or guidance to follow.
- No additional costs are associated with this option.

Impacted Parties

Individuals

At some public transport infrastructure sites, there may be no provisions for emergency egress. People with disability may not have two options available to quickly and safely egress from the site in the case of an emergency, and it may not be clear what to do during an emergency.

Operators and providers

There will be no additional costs incurred for operators and providers. Operators and providers will be required to rely on other emergency management guides, procedural manuals and fire evacuation protocols in the event of an emergency. Operators and providers will lack guidance or requirements on provisions relating to emergency egress, potentially increasing the cost to develop and procure these provisions, or decreasing the effectiveness of any provisions they develop. Operators and providers may also lack encouragement to implement best practice solutions on their public transport networks.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

The non-regulatory option will include guidance on emergency egress related to public transport infrastructure in The Whole Journey Guide.

The proposed guidance material would include the following elements:

- Passengers should have at least two accessible egress routes that lead away from bus stops, bus interchanges, tram stops and other public transport facilities located within a road reserve.
- Consultation with local councils should be conducted, particularly where public transport infrastructure interfaces with council land.
- Co-design processes should be conducted to ensure that the needs of people with disability who may experience emergency situations have been considered.
- Emergency services such as fire and police should have management procedures in place to address emergency egress at transport sites as operators or service providers do not take the lead in passenger evacuation during life threatening emergencies.
- Case studies or examples would be included in the guidance material to demonstrate best practice emergency egress scenarios.

Guidance would also encourage operators and providers to provide information to the public on the accessibility of egress routes related to public transport infrastructure throughout their networks. This information should link in with broader publication of accessibility features to assist whole-of-journey planning.

Eliminating Discrimination

To the extent that guidance is followed, discrimination against people with disability will be reduced if accessible safe egress routes are implemented and they have the same level of access to safe egress as people without disability.

However, the extent to which operators and providers are able to install additional egress routes will impact the level of discrimination people with disability face.

Key Impacts

- Where operators and providers follow the guidance provided, people with disability will be reassured that accessible infrastructure is in place if and when emergency egress is required.
- Operators and providers will benefit from case studies of best practice emergency egress scenarios.
- As guidance is not mandatory, some public transport infrastructure may not meet the new guidance, possibly leading to emergency situations where the risk of serious injury or death may increase.
- To the extent that guidance is followed, design and installation costs will be incurred to provide two accessible egress routes from public transport infrastructure.
- Costs will only be incurred to the level that operators and providers implement the guidance. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Impacted Parties

Individuals

People with disability, to the extent that guidance is followed, will be reassured there will be adequate safe egress routes from public transport infrastructure.

Operators and Providers

Operators and providers will bear installation costs.

Additional guidance will assist operators and providers manage any conflict with local government and /or road authorities' regulations

Local Government / Private Land Owners

Local councils and private land owners may experience additional costs associated with the delivery of new or modified infrastructure to the extent that guidance is followed.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

The regulatory option will include a section within the Transport Standards, supported by the Transport Standards Guidelines, to articulate high level performance requirements of egress for infrastructure.

A new section applicable only to infrastructure would be included to articulate the following:

- Passengers must have at least two accessible egress routes that lead away from all public transport infrastructure, or premises that do not form part of a premise that has a building class.
- Paths of travel must consider the required number and dimensions appropriate to consider people with mobility aids and vision impaired persons using a white cane or accompanied by an assistance animal.

The Transport Standards Guidelines would articulate the importance of consultation with land owners in developing egress solutions and emergency management planning. For example, the provision of safe egress as part of the development of emergency management planning will include:

- Consultation with local council where public transport infrastructure interfaces with council land.
- Consultation with Emergency Services (including Police, Fire or Ambulance) as Emergency Services are accountable for evacuating passengers in an emergency and have processes and procedures in place to do so. This can be supported via the aforementioned safety in design processes that operators may engage in, in the design and construction of infrastructure.

Further guidance is to be provided concerning co-design processes with end users, particularly people with disability.

Eliminating Discrimination

Mandating requirements to provide additional accessible emergency egress routes will reduce discrimination against people with disability by ensuring equal access to safe egress in an emergency.

However, given the scope of this reform (in that it will only relate to public transport infrastructure and where the Premises Standards do not apply) and the crossover of other guides, procedural manuals and emergency evacuation protocols, the extent to which discrimination will be reduced is difficult to calculate and may be limited.

Key Impacts

- People with disability will be reassured that infrastructure is in place if and when emergency egress is required.
- Operators and providers will have certainty that emergency egress requirements are in place for if and when they need to be used.
- Design and installation costs will be incurred to provide two accessible egress routes from public transport infrastructure.

- Installation and implementation may be difficult to achieve due to barriers around land ownership and ownership of assets. Upgrades to footpaths or other associated infrastructure may be required to connect to newly installed egress routes.

The cost-benefit analysis for reforms to emergency egress returned a **Benefit-Cost Ratio of 1.8** (detail below).

Impacted Parties

Individuals

At public transport infrastructure sites people with disability will have two options available to quickly and safely egress from the site in the case of an emergency.

People with disability will be afforded greater confidence and surety of travel if they can be reassured that public transport infrastructure will have adequate safe egress in case of emergencies.

Operators and providers

For those public transport sites where two egress routes are not available, operators and providers will incur upgrade costs.

Operators and providers will need to engage with local government, road authorities and private land owners to negotiate upgrades to associated footpaths or other infrastructure connected to emergency egress routes. They may also incur unnecessary regulatory burden in circumstances where two accessible emergency egress routes are not reasonably achievable.

Local Government / Private Land Owners

Local councils and private land owners may experience additional costs associated with the delivery of new or modified infrastructure, including installing footpaths to connect to newly installed egress routes.

Indicative Regulatory Impacts per year

Regulatory Benefits

The Monash University Public Transport Amenity Values report suggest that provisions of emergency egress has the potential to increase amenity value for public transport users by:

- 1.02 in-vehicle time minutes for buses, coaches and trams / light rail

Amenity uplift was assumed to be 50 per cent to reflect the addition of an emergency egress route. This benefit was apportioned to 1.6 per cent of users, reflecting the proportion of the network that would require upgrade.

Given the BCR is greater than 1.0, regulatory reform in this area is estimated to result in a net benefit relative to the status quo.

Regulatory Costs

The table below outlines the regulatory impact of implementing the regulatory option for emergency egress.

Table 29: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$1.1	\$0	\$0	\$1.1
Total over 20 years, by sector*	\$21.0	\$0	\$0	\$21.0

**The costs in Table 29 above have been determined based on the assumption that this regulatory change would be applied retrospectively over a compliance schedule. The annual total by sector is the average cost per year over the implementation timeframe of 20 years. Costs may be reduced or avoided if a longer schedule is applied to these requirements or if these requirements are not applied retrospectively.*

The intended scope of this reform applies to bus and tram / light rail stops, and does not apply to heavy rail.

The number of stops that require upgrade (i.e. that only have one egress route) was calculated based on a case study of bus stops in selected metropolitan regions. It was determined that 1.6 per cent of sites are not compliant (refer to [Appendix B](#)). The number of non-compliant stops in regional areas may be different to metropolitan areas which would change both the cost and benefit profile accordingly. That is, an increased level of cost to upgrade stops would also benefit a greater number of users across the public transport network so any net impact to the Benefit-Cost Ratio is not expected to be significant.

The cost of emergency egress is assumed to be standardised across bus and tram stops and would relate to the addition of a new egress route being installed. The costs of upgrading an existing stop to add an additional emergency egress route was determined through stakeholder consultation to be \$11,213 per site. This was assumed to be consistent across all site and all modes. There is assumed to be an immaterial incremental cost for new stops to include 2 egress routes (compared to one) and maintenance costs are not expected to increase.

5.11.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option for emergency egress is the **non-regulatory option**.

Mandating two accessible emergency egress routes at each stop should be seen as best practice and in many cases is already a reality. There are also circumstances where two accessible emergency egress routes are not reasonably achievable, and mandating these requirements would create unnecessary burden. Improved guidance for emergency egress will support existing various emergency management guides, procedural manuals and fire evacuation protocols. Non-regulatory guidance will provide flexibility to implement best practice performance solutions where land / asset ownership and local government or road authority requirements conflict with the Transport Standards.

This option has **no estimated regulatory impact**.

5.11.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

For emergency egress routes, the assumption for the CBA was that public transport operators and providers would be 25 per cent compliant at five years, 55 per cent compliant at 10 years, 90 per cent compliant at 15 years and 100 per cent compliant at 20 years as per Schedule 1.

5.12 Fit-for-purpose Accessways

5.12.1 Problem and options

The Transport Standards do not specify requirements for 'fit-for-purpose' accessways. At all times, a fit-for-purpose accessways must remain accessible to those who require it for its intended ingress and egress function and must be designed in a way to ensure direct navigation and not to have an alternative, or perceived function as a gathering or meeting space. Importantly, a fit-for-purpose accessway must have the capacity to allow for safe, timely egress of passengers from infrastructure or premises.

People with mobility impairments have raised that when ramps or walkways are co-located with stairs, they sometimes provide a path of travel inferior to the stairs that are designed to be the 'main pedestrian traffic route/branch'.

Table 30: Summary of Options for Fit-for-purpose Accessways

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	No change to the current Transport Standards Sections 2.1, 2.3 and 2.4. Change limited to additional guidance in the Whole Journey Guide.
Regulatory	No change to the current Transport Standards Sections 2.1, 2.3 and 2.4. Rather, new mandatory prescriptive and performance-based elements would be inserted into the Transport Standards.

5.12.2 Consultation Findings

While there was general support for providing additional clarity in the Transport Standards regarding fit-for-purpose accessways, responses to the Consultation RIS varied in terms of the preferred option. Industry and government submissions generally supported the inclusion of universal design principles in the design of accessways through guidance in the Whole Journey Guide. Responses from the disability community all cited the importance of mandating performance and prescriptive requirements to ensure accessways are designed in accordance with best practice.

All government and industry submissions that addressed this reform preferred the non-regulatory option. These responses stated that the prescriptive requirements of the regulatory proposal were largely unfeasible. Each referenced the need for greater flexibility to accommodate the varied location and circumstances in which accessways are situated. In particular, submissions stated that prescriptive elements of the regulatory option do not adequately account for sites with significant internal height variations or differences. In these locations, mandatory ramp accessways would be unsuitable, and instead require lift access. Likewise, the non-regulatory option was preferred as the most suitable mechanism to ensure efficiency and ease of use. Responses from industry reference the need to ensure a path of least resistance that minimises travel distance and journey time and the need to accommodate the limited availability of space in some locations. Instead, responses suggested that elements of the prescriptive requirements listed in the regulatory proposal would be better suited as a human-centred design principles in the Transport Standards Guidelines.

The intent of providing a fit-for-purpose accessway is always the objective of good design principles.

NSW Government

Additionally, government and industry submissions that raised concerns regarding the regulatory proposals prescriptive requirements noted the impact that mandating accessway requirements would have on the provision of other amenities and the potential for this impact to result in a decline in service quality. For this reason, these submissions stated that a non-regulatory approach is more suitable as it will provide information and guidance that can be referenced, but still allows flexibility to allow operators to provide best outcomes.

Some government and industry responses also cited sections of the regulatory option as being unnecessary, as Section 2.1 of the existing Transport Standards states by definition, an access path needs to be clear.

Regarding the performance based requirements of the proposal, the non-regulatory proposal is favoured, particularly by government and industry bodies, as the regulatory measure was seen to be too prescriptive. A common theme among government and industry submissions was that this element is 'impossible' to implement, as by nature of design, ramps and walkways will always have longer journey lengths and times than stairs. Submissions from all stakeholders generally supported that where possible, ramps and stairs should be co-located and provide an equivalent level of service. Responses from government and industry that supported the non-regulatory option raised that performance requirements should recognise the diverse preferences of people with disability, including whether stairs or ramps are the preferred accessway.

The outcomes to be achieved within this proposal are subjective and difficult to regulate. Users of stairs and ramps have a preference based on their individual needs. Generally, where these are co-located, a customer will choose the option that best suits their needs.

NSW Government

These submissions stated that a non-regulatory approach is more appropriate and provides flexibility to operators and providers through the provision of guidance.

Responses from disability organisations and individuals all supported the regulatory option, stating clear accessways should be applicable at all times, as the use of these areas may extend beyond transport operation hours. Responses suggested that regulation will improve usability and reliability for people with disability.

A participant in the online consultation workshops provided an example of the access barriers people with disability face when accessways are designed poorly.

There's a bus stop around the corner... all around it this road doesn't have curbs but in the middle of nowhere there's this nice accessible bus stop but how do you get to it? ... there's no footpath.

Dane, online workshop participant

Several submissions from the disability community referenced the importance of accessways being of both an appropriate size and clearly signed. Signage was associated with assisting people with disabilities to confidently navigate public transport infrastructure and premises. Likewise, the need for clear guidance regarding usage principles was noted, particularly regarding 'keep left' principles to ensure unrestricted access.

A participant in an online consultation workshop shared his experience regarding accessways, and the impact of inadequate design:

It's a gamble catching public transport because access is not always available.

Jaydan, online workshop participant

5.12.3 Impact Analysis

Status Quo Option

No change is made to the current Transport Standards text and no new guidance issued.

The Transport Standards currently covers access paths in Part 2. It identifies walkways, ramps and landings in Section 2.1. Section 2.3 allows access paths to branch into 'parallel tracks' but sets certain conditions on this. Capacity to absorb pedestrian flow at peak times or during emergency egress is not among these conditions unless 'equal convenience' is allowed in this interpretation. Section 2.4(1) of the Transport Standards provides 1200 mm as minimum width for an access path. The 1200 mm width has a 6 metre length limit before an 1800 mm wide passing space is required (Sections 4.1 and 4.2).

Effectively, any access path longer than 6 metres is likely to be 1800 mm wide unless constrained by legitimate technical issues. At busy locations, despite being conveniently located, 1800 mm access path width may not be sufficient to accommodate pedestrian flows at peak times and during emergency egress.

Universal design principles are briefly acknowledged in Section 2.1(3) of the Transport Standards Guidelines.

Eliminating Discrimination

There is no widespread benefit in maintaining the status quo. People with disability and public transport users will continue to experience the issues outlined in the problem statement.

Key Impacts

- There will be a lost opportunity to better define the design and performance requirements for accessways to address the known issues and concerns raised through the consultation process.
- There are no additional costs estimated.

Impacted Parties

Individuals

People with disability will continue to experience a lack of certainty regarding the provision of fit-for-purpose, accessible accessways. In cases where accessways are not designed in accordance with best practice, safety and amenity issues identified during consultation will remain.

Operators and Providers

Operators and providers may experience sub-optimal outcomes at some locations, resulting from inadequate design that impacts passengers negatively. Moreover, a lack of consistency between jurisdictions and projects will remain.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

The non-regulatory option would see no change to the current Transport Standards Sections 2.1, 2.3 and 2.4. Change would be limited to The Whole Journey Guide.

Transport Standards Guidelines Section 2.1 (3) offers some guidance to ensure access paths are fit-for-purpose. The section makes no reference however to the serviceability of accessible walkways compared to stairs.

The Guidelines should also reference The Whole Journey Guide's 'Fit-for-purpose access path' chapter as this can provide context and expanded informative material for access paths. It could further qualify the essential performance requirements that link together the various Transport Standards elements to ensure a continuous accessible journey. This is relevant not only to access paths, but to all the parts of the public transport environment.

Currently, The Whole Journey Guide provides no direct mention of the impact of crowding on access paths or of inappropriate use of access paths.

Information to be included in The Whole Journey Guide may comprise the following:

1. Universal design principles

Designers should strive for access paths that conform to universal design principles as far as possible. This not only ensures access path serviceability at peak times and during emergency egress but simplifies wayfinding.

2. Access paths to have appropriate dimensions

For some people with disability, crowds may deter the use of or entry into a public space. Ramps and walkways as part of public transport infrastructure should have dimensions that allow safe convenient passage at peak times and

equivalent distance to a place of safety. Guidance will be provided to encourage access paths to conform to the pedestrian Level of Service discussed in Fruin (1987).³⁶

3. Priority of access paths

Where practicable, ramps and walkways should be the primary access path, with stairs (if required) being the secondary accessway. Rather than stairs not being 'the sole means of access' they should be permitted as a concession to site constraints and to the preference of that subset of people who have disability who prefer stairs to ramps.

4. Prevention of misuse of access paths

In recognition of their importance, access path placement and design should include additional architectural options to encourage people to stand or rest away from ramps or walkways that are co-located with stairs. These options include signs, provision of alternate and more appropriate seating areas and designated smoking areas or the like, away from walkways, ramps, and stairs. Asset managers may also consider management regimes appropriate to keeping access paths navigable at peak times and during emergencies. For example, advertising signs, coffee carts, charity collectors and people distributing sample products might be located out of the access path. Designated smoking areas away from access paths might also be considered.

5. Continuous accessible journey

Fit-for-purpose access paths are links in the chain of situations that must be negotiated during a public transport journey. A broken link in the chain or a link that deters some users may prevent a successful journey. Designers should be aware that their work affects entire journeys when dealing with sometimes challenging local constraints and strive for universal design outcomes if possible.

6. Anticipating future demand

Designers should attempt to anticipate the future demand likely to be placed on public transport assets by factors such as a growing population. Infrastructure and premises often have service lives extending over many decades. The demand over the expected life of the asset should therefore be the benchmark used when estimating passenger flow at peak times.

Guidance would also encourage operators and providers to provide information to the public on the provision, location and specific design elements of accessways throughout their networks. This information should link in with broader publication of accessibility features to assist whole-of-journey planning.

Eliminating Discrimination

The non-regulatory option will assist operators and providers to reduce discriminatory outcomes.

To the extent that guidance is followed, barriers to safe and efficient travel identified by people with disability will be reduced. This may be achieved by ensuring accessways are designed and monitored with consideration of accessibility requirements through the provision of ramps, provided at an equal level of service to stairs, and connected with other components of the public transport system.

The level of reduction of discrimination is scalable and cannot be guaranteed due to the discretionary nature of the option.

Key Impacts

- Design recommendations included in the guidance will promote improved access to public transport infrastructure, and facilitate improved and safer movement through public transport infrastructure during peak times or in emergencies.

³⁶ Fruin J. (1987) *Pedestrian Planning and Design*, Elevator World, Northwestern University.

- To the extent that guidance is adopted, the design processes of accessways may become initially more onerous and incur costs. Costs will only be incurred to the level that operators and providers implement the guidance. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.
- The option provides flexibility to account for the unique constraints of each location. Due to the discretionary nature of this option, however, it does not provide certainty to people with disability that access paths will be designed in accordance with best practice universal design principles.

Impacted Parties

Individuals

People with disability, to the extent that guidance is adopted, will benefit from greater confidence and safety when using public transport. Due to the discretionary nature of the option, a lack of consistency across jurisdictions and modes of public transport may hinder the confidence of people with disability to travel using public transport.

Operators and Providers

Operators and providers will experience increased clarity regarding best practice design principles to ensure that accessways are fit-for-purpose and accessible for people with disability, while benefiting from the flexibility to accommodate the variety of settings in which accessways are located, providing relevant and appropriate accessway provisions. Operators and providers will bear the cost of any works required to fulfil accessibility requirements listed in the guidance.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

The regulatory option would see no change to the current Transport Standards Sections 2.1, 2.3 and 2.4. Rather, new mandatory prescriptive and performance-based elements would be inserted into the Transport Standards as follows:

Prescriptive elements to be inserted in Transport Standards

1. Access paths to be the principle pedestrian path of travel

Ramps and walkways must be the sole access paths provided; or

Ramps and walkways must be the principal path of travel and have primacy in pedestrian capacity over stairs; or

Ramps and walkways co-located with stairs must not have less than 50 per cent the pedestrian capacity of the stairs at peak times and during emergency egress.

2. Access paths to be kept clear at all times

Ramps, walkways and the circulation and manoeuvring areas associated with their entrances and exits must be kept clear of furniture, displays and retail features:

at all times; or

during the operational hours of the particular infrastructure.

Performance based element to be inserted in the Transport Standards

1. Access paths to have appropriate dimensions

Ramps and walkways must allow passengers with disability to enter or leave public transport nodes at peak times or evacuate during emergencies with the same convenience and in the same timeframes as passengers using other routes such as stairs.

Transport Standards Guidelines

The Transport Standards Guidelines will be amended to reflect the proposed regulatory change and will contain the following parts.

1. Universal design principles

Designers should strive for access paths that conform to universal design principles as far as possible. This not only ensures access path serviceability at peak times and during emergency egress but simplifies wayfinding.

2. Access paths to have appropriate dimensions

People with disability are particularly vulnerable to crowding. Crowds may even deter their use of or entry into a public space. Ramps and walkways as part of public transport infrastructure should have dimensions that allow them safe convenient passage at peak times and equivalent distance to a place of safety. Guidance will be provided to encourage access paths to conform to the pedestrian Level of Service discussed in Fruin (1987).³⁷

3. Priority of access paths

Where possible, ramps and walkways should be the primary access path, with stairs (if required) being the secondary accessway. Rather than stairs not being 'the sole means of access' they should be regarded as a concession to site constraints and to the preference of that subset of people with disability who prefer stairs to ramps.

4. Prevention of misuse of access paths

In recognition of their importance, access path placement and design should include additional architectural options to encourage people to stand or rest away from ramps or walkways that are co-located with stairs. These options include signs, provision of alternate and more appropriate seating areas and designated smoking areas or the like, away from walkways, ramps, and stairs.

Asset managers may also consider management regimes appropriate to keeping access paths navigable at peak times and during emergencies. For example, advertising signs, coffee carts, charity collectors and people giving out sample products might be located out of the access path. Designated smoking areas away from access paths might also be considered.

5. Continuous accessible journey

Fit-for-purpose access paths are links in the chain of situations that must be negotiated during a public transport journey. A broken link in the chain or a link that deters some users may prevent a successful journey. Designers should be aware that their work affects entire journeys when dealing with sometimes challenging local constraints and strive for universal design outcomes if possible.

6. Anticipating future demand

Designers should at all times anticipate the future demand likely to be placed on public transport assets. Infrastructure and premises often have service lives extending over many decades. The demand over the expected life of the asset should therefore be the benchmark used when estimating passenger flow at peak times and during emergency egress.

³⁷ Fruin J. (1987) *Pedestrian Planning and Design*, Elevator World, Northwestern University.

Eliminating Discrimination

By mandating prescriptive and performance based standards, barriers to safe and efficient travel identified by people with disability will be reduced, by ensuring accessways are designed and monitored with consideration of accessibility requirements and provided at an equal level of service to stairs. If additional guidance material is adopted, outcomes would be further improved, addressing recognised issues with the status quo identified during consultation.

Key Impacts

- The prescriptive and performance based requirements will enable improved access to public transport infrastructure, and facilitate improved and safer movement through public transport infrastructure during peak times or in emergencies.
- Accessways such as ramps would be provided to the same level of service as stairs, and be designed in accordance with best practice universal design principles. Consequently, the design processes of accessways may become initially more onerous and incur costs.

The cost-benefit analysis for reforms to fit-for-purpose accessways returned a **Benefit-Cost-Ratio of 0.86** (detail below).

Impacted Parties

Individuals

People with disability will be provided certainty that accessways have been developed using universal design principles, and that accessible facilities will provide an equal level of service to other forms of accessways such as staircases. Individuals would benefit from improved safety, particularly during peak times or during emergency.

Operators and Providers

Operators and providers will be provided clarity regarding design standards to ensure accessibility. The upfront design and build process of accessways for operators and providers may be more onerous and incur costs. This also may vary depending on the location of the access path (for example, where there is a requirement to go over or under train lines). Retrofitting costs can be varied depending on the extent of implementing changes and how these changes apply retrospectively for existing assets. Costs would be comparative to the level and complexity of retrofit adopted.

Indicative Regulatory Impacts per year

Regulatory Benefits

The Monash University Public Transport Amenity Values report suggests that provision of fit-for-purpose accessways has the potential to increase amenity for public transport users by:

- 1.02 in-vehicle time minutes for buses, coaches and trams / light rail

Amenity uplift was assumed to be 40 per cent to reflect the current Transport Standards requirements that provide the majority of the benefit relating to step-free access to a station or a stop. The safety benefit associated with the proposed regulation was determined to be a 5 per cent reduction in incidents. The safety benefit associated with the proposed reform is lower due to the fact that ramps are already required under the Transport Standards and the proposed changes only require them to be fit-for-purpose. This benefit was apportioned to 1.6 per cent of users, reflecting the proportion of the network that would require upgrade.

Given the BCR is less than 1.0, regulatory reform in this area is not estimated to result in a net benefit relative to the status quo.

Regulatory Costs

The table below outlines the regulatory impact of implementing the regulatory option for fit-for-purpose accessways.

Table 31: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$1.8	\$0	\$0	\$1.8
Total over 20 years, by sector*	\$35.0	\$0	\$0	\$35.0

*The costs in Table 31 above have been determined based on the assumption that this regulatory change would be applied retrospectively over a compliance schedule. The annual total by sector is the average cost per year over the implementation timeframe of 20 years. Costs may be reduced or avoided if a longer schedule is applied to these requirements or if these requirements are not applied retrospectively.

The number of sites that require upgrade was calculated based on stakeholder consultation and a case study of sites in selected metropolitan regions. It was determined that 1.6 per cent of sites are not compliant (refer to [Appendix B](#)). The number of non-compliant sites in regional areas may be different to metropolitan areas which would change both the cost and benefit profile accordingly. However, an increased level of cost to upgrade sites would also benefit a greater number of users across the public transport network so any net impact to the Benefit-Cost Ratio is not expected to be significant.

The cost associated with upgrading an existing site to meet the proposed regulatory requirements was assumed to be \$18,750 per site. This figure is the average value quoted in survey responses received and was assumed to be consistent across all modes and jurisdictions. There is assumed to be no incremental cost of repairs and maintenance, and no incremental end-of-life renewal costs.

5.12.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option is the **non-regulatory option**.

Responses from the disability community all supported the regulatory option as a method to ensure reliability of access when using public transport. Responses from operators and providers all supported the non-regulatory option to provide best practice advice for designing fit for purpose accessways.

The non-regulatory option provides clear guidance regarding best practice design principles for fit for purpose accessways, while accommodating the diverse requirements of each public transport precinct. While mandating prescriptive and performance based requirements listed in the regulatory option would ensure compliance, impact analysis has determined that in many cases, the requirements are unfeasible and are inappropriate for inclusion in the Transport Standards.

This option has **no estimated net regulatory cost**.

Case study – Amy uses a wheelchair and catches public transport every day but finds it difficult to navigate her wheelchair around access paths into and around infrastructure and premises.

Status Quo – Amy’s experience today

Amy enters the train station via the alternative ramp entry, however due to the path being congested with stationary crowds using it as a resting point Amy is unable to quickly navigate along the ramp to catch her suburban service. Amy is frustrated and becomes reluctant to undertake train travel via that station again.

Preferred option – Amy’s experience if the guidance is enacted

Amy confidently enters the train station via the alternative ramp entry. Universal design concepts have been considered in the design of the accessways and the paths into the station remain clear and are large enough to meet the pedestrian demand. Amy independently navigates into the station and boards her train without difficulty.

5.12.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

The proposed changes to fit-for-purpose accessways will represent a new requirement in the Transport Standards. The assumption for the CBA was that public transport operators and providers would be 25 per cent compliant at five years, 55 per cent compliant at 10 years, 90 per cent compliant at 15 years, and 100 per cent compliant at 20 years.

5.13 Wayfinding

5.13.1 Problem and options

While the current Transport Standards covers several separate elements for wayfinding, such as symbols, signs, the use of tactile ground surface indicators (TGSIs) and lighting, broader range of elements such as luminance contrast, necessary to ensure good wayfinding, particularly in infrastructure and premises such as airports and rail stations, are not covered.

People with disability have indicated the current Transport Standards do not provide adequate wayfinding requirements to assist people with a range of disabilities to independently and effectively navigate their way through transport related infrastructure and premises.

Currently there is no single standard or guideline that offers a consistent, integrated approach to providing information for people with disability concerning wayfinding. Inconsistencies between the Transport Standards, the general provisions and Part H2 of the Premises Standards result in a lack of regulatory clarity.

Wayfinding is important to people who are blind or have low vision, as it is difficult to access most visual cues available to people without disability to assist with their wayfinding needs. Good wayfinding cues are also important for people with intellectual or cognitive disability, people who have difficulty orienting themselves in unfamiliar environments and people who may not read or understand English.

Table 32: Summary of Options for Wayfinding

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Additional guidance and expanded informative material would be included in The Whole Journey Guide to provide advice on wayfinding cues such as luminance contrast, TGSIs and braille and tactile signs.
Regulatory	Regulatory changes to the Transport Standards would be made to address inconsistencies between the Transport Standards and the National Construction Code and Premises Standards, and to provide specifications regarding luminance contrast, TGSIs and braille and tactile signs.

5.13.2 Consultation Findings

There was general consensus from submissions that the current provisions for wayfinding in the Transport Standards are inadequate and lack consistency, and there was broad support for amendments that provide improved guidance and information to enable good wayfinding.

A majority of responses from all groups also supported aligning the Transport Standards with the National Construction Code (NCC) and the Premises Standards, an issue that has been called out consistently throughout the reform process and previous Transport Standards reviews.

However, stakeholders had varying views regarding the most effective approach, with the majority of responses from individuals and the disability community supporting regulatory change, while governments and industry tended to prefer a non-regulatory approach.

A strong theme coming from the responses was that wayfinding is haphazard, inconsistent and creates confusion for those passengers who rely on wayfinding cues. Responses from the disability community highlighted the significant safety risk created if design and implementation of wayfinding is poor.

The impact of inadequate wayfinding cues, or cues that are inconsistent across a person's journey, can lead to increased stress and potentially create dangerous or even life-threatening situations if a person misunderstands the purpose of a particular cue, or if a particular cue is not used consistently across different transport modes.

Vision Australia

Responses from disability groups highlighted the challenges that need to be considered in design and implementation due to wayfinding crossing disability cohort boundaries. Wayfinding is not only used by people who are blind or have low vision, but also people on the autism spectrum, people with intellectual disability, people with physical disability and others.

To ensure the safety needs of all passengers are met, wayfinding needs to be balanced, continuous, intuitive and consistent between locations.

People can find large gaps in their line of cues and these gaps are a challenge. Alternatively, a proliferation of cues can be confusing, for example TGSIs leading in any direction can baffle people trying to find their way.

Queenslanders with Disability Network

To address this, many responses from all stakeholder groups supported consistency in design of wayfinding cues, consultation and co-design with impacted users and the disability community in implementation, and alignment with the requirements in the NCC and Premises Standards. A common theme was also that co-design ensures good wayfinding solutions are implemented in complex and bespoke public transport precincts.

Co-designing conveyances, infrastructure and premises with the relevant community stakeholders will ensure that good, well-conceived and well-connected cue lines can be established at new and existing sites and conveyances.

Queenslanders with Disability Network

Disability community responses highlighted that reform was required to provide greater clarity around design and placement of TGSIs and to improve luminance contrast requirements along internal and external access paths. Many noted that signs are often badly placed, are misleading and contain out of date information which causes confusion and a lack of confidence for passengers who rely on visual cues.

Some government and industry submissions have raised concerns with the ability to measure luminance contrast. However, luminance contrast is already a requirement in Section 2.5(2) of the Transport Standards³⁸. The proposed requirements provide further clarification on the surfaces that should be used in calculating the luminance contrast. Additionally, this requirement would only be applicable to the extent that a continuous accessible path of travel is an access path under Section 2.2 of the Transport Standards.

Responses from operators and providers that supported the non-regulatory option noted that additional guidance provides design standards that can be referenced, while allowing flexibility for operators and providers to provide the best outcomes. These submissions argued guidance would provide sufficient certainty for operators and providers to implement good wayfinding solutions while also providing flexibility to adopt performance based solutions.

It was noted that the current level of flexibility and ambiguity in the Transport Standards creates inconsistencies and causes confusion for users and operators. This highlights that striking a balance between performance and prescriptive elements is crucial.

Submissions from operators and providers acknowledged the difficulties in achieving consistency in design and location of amenities and features across different conveyances and complex public transport sites. The majority of these responses supported collaborative design processes, consultation and co-design with impacted users on a site-by-site basis to achieve consistency and good outcomes. The majority of operator and provider responses supported the inclusion of references to AS1428.4.2 (2018) in the Transport Standards Guidelines to provide information on good wayfinding elements and provision of signs

There was nil support for mandating these requirements.

³⁸ Section 2.5(2) of the Transport Standards - obstacles that abut an access path must have a luminance contrast with background of not less than 30%

5.13.3 Impact Analysis

Status Quo Option

No change is made to the current Transport Standards text or Transport Standards Guidelines.

The wayfinding provisions in the Transport Standards would continue to be presented in a fragmented way and inconsistencies between the Transport Standards, NCC and the Premises Standards would remain.

Eliminating Discrimination

The status quo will not address discriminatory outcomes where the ability of people with disability to use public transport is limited due to inadequate wayfinding cues. People with disability will continue to experience limited independent access to public transport.

Key Impacts

- People with disability and public transport users will continue to experience the issues outlined in the problem statement.
- Inconsistencies between the Transport Standards, NCC and Premises Standards would remain and would continue to cause confusion for passengers and regulatory uncertainty for operators and providers.
- Clarity for operators and providers around the design and implementation of good wayfinding would not be provided.
- There will be a lost opportunity to address the safety concerns and inconsistency issues with current practice.
- No new additional costs are estimated.

Impacted Parties

Individuals

People with disability would continue to experience limited independent access to public transport systems because the Transport Standards do not adequately address wayfinding guidance or requirements. Wayfinding cues will continue to be fragmented and haphazard causing confusion and safety risks for passengers.

Operators and providers

Operators and providers will continue to have different requirements under the Transport Standards and other standards, causing unnecessary regulatory complexity. Operators and providers will lack clear guidance or requirements on wayfinding, potentially increasing the cost to implement wayfinding solutions or decreasing the functionality of the solutions they provide. Operators and providers may also lack encouragement to implement best practice solutions on their public transport networks.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

This option would not involve any changes to the Transport Standards or Transport Standards Guidelines. Instead, additional wayfinding guidance would be inserted into The Whole Journey Guide. Alternatively, a specific wayfinding guideline could be developed to encourage consistency between the Transport Standards, NCC and Premises Standards.

The expanded wayfinding section in the Whole Journey Guide or the new wayfinding guideline, would provide valuable guidance for public transport operators and providers to improve independent transport usage and minimise discrimination against people with disability at public transport sites.

Guidance to be included in The Whole Journey Guide would include:

- Reference to the NCC / Premises Standards, such as clause D3.6 (signage), specification D3.6 (braille and tactile signs) and clause D3.8 (tactile indicators).
- Reference to Australian Standards AS1428.1 (2009) Clauses 8.1 (signs), 8.2 (symbols) and 9 (TGSIs) as amended and AS/NZS1428.4.1 (2009) Sections 2 (warning TGSIs) and 3 (directional TGSIs) as the appropriate technical specification references for TGSIs to meet Transport Standards obligations.
- A minimum 30 per cent luminance contrast between internal floor and wall surfaces and between internal columns and wall or floor surfaces along continuous accessible paths of travel should be provided.
- A minimum 30 per cent luminance contrast between external ground surfaces and street furniture/fixtures and between external columns and ground surfaces along external areas along a continuous accessible path of travel should be provided.
- Guidance on the need to install TGSIs at the top and bottom of step ramps in passenger use areas of transport related buildings and infrastructure.
- Reference to the appendices of AS 1428.4.2 (2018) as informative material aimed at providing designers, operators and providers with guidance on how to integrate wayfinding elements to achieve better outcomes for transport users.

Eliminating Discrimination

To the extent that guidance is followed, discrimination against people with disability will be reduced if wayfinding solutions are consistent and implemented appropriately to take into consideration all passengers. Improved wayfinding will afford people with disability greater access to independent travel, reducing a key barrier to traveling on public travel.

The level of reduction of discrimination is scalable and cannot be guaranteed due to the discretionary nature of the option.

Key Impacts

- To the extent that guidance is implemented, clearer wayfinding information would be maximised and made nationally consistent to the extent possible.
- Strengthened expectations for requirements for operators and providers through improved guidance and informative material.
- Flexibility in the implementation and design of wayfinding solutions to allow for the challenges of bespoke and unique public transport sites.
- To the extent that guidance is implemented, improved consistency across the NCC, Transport Standards and the Premises Standards.
- Due to the discretionary nature of this option, it does not provide certainty that best practice for wayfinding will be applied nor that consistency across transport precincts will be achieved.
 - For example, different requirements may be used for tactile signage which may cause confusion for passengers who read braille.
- The benefits will only be realised to the extent that operators and providers choose to comply with the guidance.
- Regulatory clarity or consistency across the NCC, Premises Standards and the Transport Standards will not be achieved.
- To the extent that guidance is implemented, where current wayfinding practices are not in line with the requirements, installation costs will be incurred.
- Costs will only be incurred to the level that operators and providers implement the guidance. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Impacted Parties

Individuals

Passengers will benefit from improved safety from good wayfinding designs to the extent that guidance is implemented. Passengers with disability will be afforded greater confidence to travel and ability to travel independently if they can be assured guidance is being adopted.

People with disability may be involved in design and implementation through consultation and co-design to promote best practice and effective wayfinding solutions.

Individuals may still experience inconsistencies across public transport sites given the discretionary nature of this option.

Operators and Providers

Operators and providers will bear implementation costs, including any installation of new signs, TGSIs, tactile text and braille equivalent.

Operators and providers will be afforded the flexibility to adopt guidance to suit operational needs. Operators and providers will benefit from improved guidance and in depth information which incorporates accessibility needs for people with disability in relation to best practice wayfinding solutions.

Operators and providers will continue to have different requirements under the Transport Standards and under other standards, causing unnecessary regulatory complexity.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

This option would make regulatory changes to the Transport Standards to address inconsistencies between the Transport Standards, the NCC and the Premises Standards in relation to a range of matters concerning wayfinding. This option would also see a change to the Transport Standards Guidelines by introducing guidance on several new wayfinding provisions covered in Appendix C of AS1428.4.2 (2018)³⁹.

The wayfinding regulatory changes would include:

- Replication of the current NCC clause D3.6 (signage), specification D3.6 (braille and tactile signs) and clause D3.8 (tactile indicators). Sans serif will be nominated as the required typeface with fonts such as Helvetica and Arial provided as examples.
- Reference to Australian Standard AS1428.1 (2009) Clauses 8.1 (signs), 8.2 (symbols) and 9 (TGSIs) as amended and AS/NZS1428.4.1 (2009) Sections 2 (warning TGSIs) and 3 (directional TGSIs) as the appropriate technical specification references for TGSIs to meet Transport Standards obligations.
- A provision specifying a minimum 30 per cent luminance contrast between internal floor and wall surfaces and between internal columns and wall or floor surfaces along continuous accessible paths of travel.
- A provision specifying a minimum 30 per cent luminance contrast between external ground surfaces and street furniture/fixtures and between external columns and ground surfaces along external areas along a continuous accessible path of travel.
- A provision specifying the installation of tactile ground surface indicators at the top and bottom of step ramps in passenger use areas of transport related buildings and infrastructure.

³⁹ AS1428.4.2 2018 - Means to assist the orientation of people with vision impairment - Wayfinding signs

The Transport Standards Guidelines would also be updated to include reference to the appendices of AS 1428.4.2 (2018) as informative material aimed at providing designers, operators and providers with guidance on how to integrate wayfinding elements to achieve better outcomes for transport users.

Following feedback through the Consultation RIS, the features for this option have been refined. Specifications were included to provide clarity regarding the typeface requirements for braille and tactile signs where the Premises Standards and AS1428.1 2009 are not completely aligned.

Additionally, the Transport Standards Guidelines would be updated to include guidance on collaborative design processes and consultation with impacted users in the development and implementation of wayfinding solutions. This advice would be included in the Guidelines because submissions highlighted the necessity of collaborative design to ensure wayfinding approaches are effective, fit-for-purpose, meet the needs of all passengers and can cater for the challenges of unique public transport sites.

Eliminating Discrimination

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability.

Mandating requirements which improve the effectiveness of wayfinding in public transport sites will provide the certainty, clarity and confidence for people with disability to travel independently. If a passenger is unable to adequately and safely navigate through public transport networks, this could prevent them from being able to use public transport.

Mandating requirements for luminance contrast will ensure people who are blind or have low vision have a safe accessible path of travel, similar to that of other passengers who do not have a vision impairment. Requirements that apply best practice and improve certainty will provide the best functional outcomes for people with disability.

The enhanced wayfinding requirements will provide a clear regulatory framework to better help eliminate discrimination for people with disability using public transport.

Key Impacts

- The adoption of current NCC provisions in relation to signage and TGSIs would improve consistency between the Transport Standards, the NCC and the Premises Standards and reduce unnecessary regulatory complexities.
- Improved consistency in design and implementation of wayfinding cues and provides clarity regarding luminance requirements. Operators and providers may face challenges with respect to measuring luminance contrast and achieving this requirement may not be possible for legacy infrastructure and existing assets.
- Enhanced certainty for operators and providers to meet their regulatory obligations and improved surety and clarity for designers.
- Improved effectiveness of wayfinding solutions resulting in improved safety, fewer accidents and injuries.
- Assists in resolving conflict between standards governing shared environments by providing stronger and clearer regulations.
- Provides accountability and impetus to improve accessibility.
- Installation costs where wayfinding cues do not currently meet the proposed requirements will be incurred. Retrospective costs associated with legacy infrastructure and existing assets could be significant.

The cost-benefit analysis for reforms to wayfinding returned a **Benefit-Cost Ratio of 4.3** (detail below).

Impacted Parties

Individuals

People with disability will benefit from improved confidence and certainty of travel. All passengers will be impacted by improved safety through effective wayfinding cues and reduced safety risks such as overuse of TGSIs.

Consistent expectations of design and layout of wayfinding across different public transport sites will assist people with disability to navigate public transport sites. This may result in an increased ability of people with disability to undertake public transport journeys resulting in increased participation in the workforce and community life.

Operators and Providers

Operators and providers would bear the implementation costs where they are not currently adhering to the regulatory requirements. Where operators and providers already adhere to the NCC and Premises Standards requirements, impacts and costs will be minimised. Operators and providers may need to audit their public transport sites to ensure they are meeting the new regulatory requirements and may need to conduct co-design processes to ensure their solutions are effective.

While this option imposes additional regulation for operators and providers, they will be provided regulatory clarity through improved consistencies across the NCC, Transport Standards and the Premises Standards which will help to reduce overall regulatory burden (by only having to comply with one set of consistent standards).

Indicative Regulatory Impacts per year

Regulatory Benefits

The Monash University Public Transport Amenity Values report suggests that improved provision of signage has the potential to increase amenity for public transport users by:

- 1.20 in-vehicle time (IVT) minutes for buses, coaches and trams / light rail
- 0.30 IVT minutes for trains and ferries

The base case for wayfinding assumes a 95 per cent level of amenity accounting for improved signage visibility and legibility. The amenity benefit has been reduced by 50 per cent to reflect that some signage across the network is already compliant and many users do not interact with directional signage as part of their commute. The amenity value for trains is reduced by 80 per cent to take into consideration the majority of directional signage at train stations is covered by the Premises Standards.

Given the BCR is greater than 1.0, regulatory reform in this area is estimated to result in a net benefit relative to the status quo.

Regulatory Costs

The table below outlines the regulatory impact of implementing the regulatory option for wayfinding.

Table 33: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$6.9	\$0	\$0	\$6.9
Total over five years, by sector*	\$34.4	\$0	\$0	\$34.4

**The costs in Table 33 above have been determined based on the assumption that this regulatory change would be applied retrospectively over a compliance schedule. The annual total by sector is the average cost per year over the implementation timeframe of five years. Costs may be reduced or avoided if a longer schedule is applied to these requirements or if these requirements are not applied retrospectively.*

Based on values provided in the CBA survey responses, the cost of wayfinding reforms (principally signage) was estimated at an average of \$250 across bus and tram stops and \$1,000 for train stations and ferry terminals. Wayfinding costs are provided as an average estimate across the network.

It was assumed there are no incremental repair and maintenance costs as these would be similar to that of existing signage. That is, renewal of signage and other wayfinding measures is not expected to result in an incremental cost compared to renewal of non-compliant wayfinding measures.

Stakeholders indicated that many of the wayfinding reforms, particularly for premises in train stations, are already covered under the Premises Standards. This analysis only considered the incremental reform for non-Premises Standards related infrastructure.

5.13.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option for wayfinding is the **regulatory option**.

Submissions indicated that the current provisions for wayfinding are inadequate, are inconsistent and can be a significant barrier to independent travel for passengers who rely on wayfinding cues to navigate public transport sites. There was broad support for aligning requirements in the Transport Standards, the National Construction Code and the Premises Standards from all stakeholder groups. Whilst non-regulatory guidance may assist operators and providers, it would not resolve the issues with the existing regulation's misalignment identified by stakeholders.

The cost-benefit analysis for reforms to wayfinding returned a **Benefit-Cost Ratio of 4.3**.

This option has an estimated net regulatory cost of **\$34.4 million over five years**.

5.13.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

For wayfinding, the assumption for the CBA was that public transport operators and providers would be 100 per cent compliant in five years as per Schedule 1 (symbols / signs). This relates to all proposed changes except for changes relating to TGSIs which would align with the assumptions underpinning the TGSIs regulatory amendments. That is, operators and providers would be 25 per cent compliant in five years, 55 per cent compliant in 10 years, 90 per cent compliant in 15 years and 100 per cent compliant in 20 years as per Schedule 1 (TGSIs).

5.14 Tactile Ground Surface Indicators

5.14.1 Problem and options

The current Transport Standards do not include adequate requirements for directional tactile ground surface indicators (TGSIs) to assist people who are blind or have vision impairment to navigate through public transport precincts. This often leads to a poor understanding of what is required resulting in an inconsistent application or, in some instances, the absence of directional cues.

Some people with vision impairment use wayfinding cues such as directional TGSIs to navigate independently. However, TGSIs have limitations as a wayfinding cue by only providing the user directions in a single pre-determined way.

The Australian Standard for TGSIs (AS1428.4.1:2009) makes provision for directional TGSIs and infers they are required to assist in wayfinding in the absence of other directional cues, such as hand rails and walls, which can be followed by people with vision impairment through shorelining (following a wall, kerb, hedge or other contrasting surface to the one a person is walking on in order to maintain a specific orientation while travelling through environments to arrive at a decision-making point). Directional TGSIs are needed in the absence of such physical cues in the environment or where the installation of other permanent measures is technically not feasible (for example, in open air environments).

Some public transport providers report that they have received advice from the disability community that directional TGSIs should not be used as they can become confusing and dangerous, particularly for mobility aid users. Therefore, it is important to consider what is required to minimise this discomfort to some users, while also allowing people with vision impairment to navigate independently to essential locations.

Table 34: Summary of Options for Tactile Ground Surface Indicators

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Additional guidance and expanded informative material would be included in The Whole Journey Guide and the Transport Standards Guidelines to provide advice on the use and application of directional TGSIs.
Regulatory	Mandatory prescriptive elements would be included in the Transport Standards to define the requirement for the use of directional TGSIs and provide additional guidance on the use, placement and purpose of directional TGSIs.

5.14.2 Consultation Findings

The majority of responses supported amendments that would promote consistency and better outcomes in relation to the use of directional TGSIs. There was broad consensus across the disability community as well as operators and providers of public transport that there are challenges with getting the balance right when installing directional TGSIs, to ensure they assist people who are blind or have low vision but do not present a safety risk to others, including people using mobility devices.

A key theme across all groups was that the current requirements and guidelines are inadequate to assist operators and providers to effectively use directional TGSIs as a balanced wayfinding tool in public transport sites. It was also broadly acknowledged by all stakeholders that given the unique layouts of public transport precincts, consultation and co-design with the disability community is critical when implementing TGSIs and wayfinding cues more generally. Responses highlighted the importance of ensuring the Transport Standards provide a consistent approach on the use of directional TGSIs from the point of entry of a transport site to key wayfinding points such as the entrances to stairs, escalators and lifts to the platform, boarding doors of conveyances and real time information points.

All responses from the disability community supported the regulatory option, highlighting that both warning and directional TGSIs should be accounted for in the Transport Standards. Inappropriate use of TGSIs can not only be a safety hazard for people using mobility devices, but can also be confusing and even dangerous to people who are blind or have low vision who rely heavily on the use of TGSIs to navigate their public transport journey.

[Poor placement of TGSIs] *can be dangerous and potentially life-threatening for people who are blind or have low vision.*

Vision Australia

The appropriate placement of directional TGSIs is critical, with one response recounting an instance at a bus station where new directional TGSIs were installed which connected to touchscreen information kiosks. These kiosks lacked an audio alternative to the digital screen and had no audio component, effectively rendering the TGSi pathway useless.

[TGSIs are] *not necessarily the answer to everything... better design is the first step*

Jennifer, online workshop participant

Given the competing priorities of diverse disabilities, disability groups considered that the regulatory option was an effective, holistic solution as it clearly sets out competing access considerations and prescribes the appropriate use of TGSIs. Co-design with the disability community and affected users was seen as essential to account for the unique layouts of public transport sites, to ensure the placement of TGSIs is appropriate and that all impacts can be accounted for. Responses also highlighted the benefits of incorporating emerging technologies such as Bluetooth beacons into wayfinding, however indicated the importance of ensuring technological solutions are not the only mode of wayfinding cues.

Operators and providers of public transport varied in support for either the regulatory or non-regulatory option. The majority of responses acknowledged there is a lack of clarity around requirements, including placement and installation, for TGSIs. At the same time, responses pointed to challenges finding a solution which balances the needs of all users, including catering for different disabilities, and reflects the difficulties of varied land ownership in transport precincts. These difficulties are further exacerbated in relation to light rail due to a lack of clarity around delineation between tram stops and the public realm and where the Transport Standards and road authority standards differ.

Operators and providers broadly supported amendments which aim to rationalise the use of directional TGSIs and minimise conflict between different disability user groups. Responses generally supported co-design and engagement with the disability community and affected users when implementing TGSIs to get the balance right to provide the best outcome for users. However, it was acknowledged that reaching consensus can be difficult due to the conflicting impacts on different user groups.

Directional TGSIs are utilised by customers with vision impairments however there is no clear guidance on the application of directional TGSIs within the current Transport Standards. Clarification is required to assist with their rationalised use, to ensure maximum effectiveness for customers and to minimise conflict between disability user groups.

NSW Government

Where responses preferred the non-regulatory option or the status quo, the rationale was largely because operators and providers already adhere to AS1428.4.1 (2009) when installing both directional and warning TGSIs and that regulating this requirement is unnecessary. These responses supported detailed guidance which includes examples, arguing this would be sufficient to promote best practice and achieve accessibility outcomes.

There were concerns from a majority of operator and provider submissions that any retrospective application of the requirements would have significant costs for existing assets and infrastructure. Where regulation was supported, responses identified that these requirements should only apply to new infrastructure or assets or when major upgrades are scheduled to occur.

5.14.3 Impact Analysis

Status Quo Option

No change is made to the current Transport Standards text and or Transport Standards Guidelines.

Under this option, the Transport Standards would continue to provide guidance on the applications of warning TGSIs; however, will stay silent on directional TGSIs and more broadly, requirements to assist people who are blind or have low vision to navigate independently through transport precincts.

Eliminating Discrimination

The status quo will not address discriminatory outcomes where the ability of people with disability to use public transport is limited due to inadequate and ineffective use of TGSIs as a wayfinding tool.

People with disability and public transport users will continue to experience the issues outlined in the problem statement. Ineffective use of TGSIs will continue to act as a barrier to accessing public transport.

Key Impacts

- There will be a lost opportunity to address the safety concerns and inconsistency issues with current practice.
- People with disability will continue to experience limited independent access to public transport.
- No new additional costs are estimated for operators and providers.
- No new administrative costs will be incurred.

Impacted Parties

Individuals

People with disability would continue to experience limited independent access to public transport systems due to an inconsistent application of, or in some instances, the absence of directional cues. Passengers may still experience safety concerns if directional TGSIs are used inappropriately.

Operators and providers

Operators and providers would not incur any additional costs. Operators and providers may still face uncertainty surrounding appropriate use of TGSIs. Overuse of directional TGSIs may still occur which would continue to be a safety risk for passengers and an inefficient use of resources. Operators and providers may also lack encouragement to implement best practice solutions on their public transport networks.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

An additional chapter in The Whole Journey Guide would be inserted to provide further information on:

- The purpose of TGSIs (both warning and directional) as a wayfinding tool.
- The outcomes of using TGSIs to provide safe travel routes, provide directional cues and signal entry points.
- Appropriate use and application of TGSIs to avoid unintended adverse impacts to other users.

Proposed content to be included in the Transport Standards Guidelines include:

- Wayfinding solutions (including the use of TGSIs) should be developed through a co-design process to ensure the functionality of the solution meets the needs of end users and is fit for purpose.
- Any infrastructure or equipment installed as part of the accessibility design solution should be appropriately maintained throughout the life of the asset to ensure:
 - Ongoing functionality of the asset.
 - Ongoing safety of the asset. This is particularly important for assets installed at ground level such as TGSIs which could present a safety hazard if not properly maintained.

The requirements would not be mandatory, but would provide a clear understanding of what is expected to assist vision impaired customers access the services of public transport without precluding innovation.

Eliminating Discrimination

To the extent that guidance is followed, discrimination against people with disability will be reduced if the use of directional TGSIs are consistent and implemented appropriately to take into consideration all passengers. Improving the effectiveness of TGSIs as a good wayfinding tool will afford people with disability greater access to independent travel, reducing a key barrier to traveling on public travel.

The level of reduction of discrimination is scalable and cannot be guaranteed due to the discretionary nature of the option.

Key Impacts

- Greater clarity regarding the use of directional TGSIs.
- Clear, practical guidance will improve design and implementation of TGSIs, enabling people with disability to effectively navigate through public transport sites and improving the safety of all passengers by ensuring TGSIs are appropriately placed.
- To the extent that guidance is followed, consistency on use and application of TGSIs will be achieved, to the extent possible, across public transport sites
- Due to the discretionary nature of this option, it does not provide certainty that best practice for design and implementation of directional TGSIs will be applied nor that consistency across transport precincts will be achieved.
 - For example, directional TGSIs may be installed at certain infrastructure sites but not others, and they may not be located in an area that can be easily located by a passenger.
- The benefits will only be realised to the extent that operators and providers choose to comply with the guidance.
- This option will not provide regulatory clarity or consistency for requirements for directional TGSIs. The Transport Standards will continue to be silent on the requirements for directional TGSIs, adding to regulatory uncertainty.
- To the extent that guidance is implemented, where directional TGSIs are not installed or do not meet the proposed requirements, installation costs will be incurred.
- Costs will only be incurred to the level that operators and providers implement the guidance. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Impacted Parties

Individuals

To the extent that guidance is followed, passengers may be afforded a safer access of travel through safer implementation of directional TGSIs across public transport sites.

People with disability may be afforded greater surety of and confidence to travel on public transport if they can be assured guidance is implemented.

Individuals may still experience inconsistencies across public transport sites given the discretionary nature of this option.

Operators and Providers

To the extent that guidance is adopted, operators and providers will bear installation costs.

Provides flexibility for operators and providers to adopt parts of the guidance to suit their needs and manage operational constraints. Improved guidance will provide operators and providers in depth information to incorporate accessibility needs for people with disability in relation to best practice wayfinding solutions.

As the Transport Standards will remain silent on requirements for directional TGSIs, regulatory uncertainty for operators and providers may remain.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

This option would see content added to the Transport Standards to define the requirement for the use of directional TGSIs, adopting the requirements of AS1428.4.1:2009.

Changes will include design requirements and additional guidance on where it is expected that directional TGSIs may be used to assist vision impaired customers to navigate transport facilities in the absence of other wayfinding cues. Importantly, these requirements would also establish where directional TGSIs are not required due to the potential to interfere with mobility aids or create confusion for people with vision impairment.

The following prescriptive requirements would be inserted into the Transport Standards:

- Where used, the design of warning tactile ground surface indicators must comply with the design with AS1428.4 (2009) Clause 2.3.2 Design requirements.
- Where used, the design of directional tactile ground surface indicators must comply with the design with AS1428.4 (2009) Clause 3.3.2 Design requirements.
- Where directional TGSIs are used in the absence of other wayfinding cues, they must be installed in accordance with AS1428.4 (2009) Clause 3.2.1 General, Clause 3.2.3 Placement and Clause 3.3 Change of Direction.

The Transport Standards Guidelines would be updated to include the following advice:

- Directional TGSIs should be used:
 - To provide a safe route.
 - Give directional cues to deviate from the regular path of travel to get to a key destination or facility such as boarding points or help or information points.
 - Signal a point of entry / exit to a facility or pedestrian crossing.
- The use of Directional TGSIs should be minimised through good design and provision of other natural wayfinding cues such as provision of shorelines.
- The placement of TGSIs should consider the safest and most efficient route for people with vision impairment to assist in navigation and orientation whilst minimising the impacts of other passengers.

Eliminating Discrimination

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability.

Mandating requirements will provide certainty that installation of directional TGSIs are consistent and are as functionally accessible to the greatest extent possible across public transport networks.

Improving the effectiveness of TGSIs in public transport sites will reduce discrimination against people with disability by ensuring they can travel independently. If a passenger is unable to adequately and safely navigate through public transport networks, this could prevent them from being able to use public transport.

Requirements that apply best practice and improve certainty will provide the best functional outcomes for people with disability.

Regulating requirements for directional TGSIs would also safe-guard best practice and prevent any future dis-benefit. That is, any changes by operators and providers that could result in decreased accessibility in the future is prevented by implementation of the reform.

Key Impacts

- Providing clear technical specifications and requirements for directional TGSIs and alignment with current industry practice in relation to installation of directional TGSIs.
- Improved consistency of design and application of TGSIs across public transport networks, including more efficient and effective placement of TGSIs.
- Maintains accountability for measuring compliance and provides accountability and impetus to improve accessibility if it is mandated.
- Improved safety and functionality of public transport assets.
- Assists in resolving conflict between standards governing shared environments by providing stronger and clearer regulations.
- Costs associated with installation of directional TGSIs will be incurred, additional costs may be incurred if directional TGSIs currently installed in transport networks do not meet the new technical requirements.
- Additional costs will also be incurred where appropriate surfaces are required to be prepared or resurfaced prior to installing TGSIs (for example resurfacing costs could potentially be significant).
- Reducing the overuse and inappropriate use of TGSIs will reduce unnecessary spending and support more efficient allocation of resources when implementing wayfinding solutions.

The cost-benefit analysis for reforms to TGSIs returned a **Benefit-Cost Ratio of 6.4** (detail below).

Impacted Parties

Individuals

People with disability will be afforded improved confidence and surety of travel and passenger safety will be improved resulting from the reduction in risk associated with inappropriate or overuse of TGSIs.

Passengers will benefit from consistent expectations of design and layout of TGSIs across different public transport sites, improving navigation of public transport sites.

Increased ability for people with disability to undertake public transport journeys resulting in increased participation in the workforce and community life.

Operators and Providers

Greater clarity for installation and design for operators and providers, greater regulatory certainty of requirements and obligations under the Transport Standards. Aligning regulatory requirements for both warning and directional TGSIs will improve regulatory clarity for operators and providers.

Operators and providers will benefit from more efficient allocation of resources due to appropriately installing TGSIs only where necessary.

Operators and providers will incur costs with installation of directional TGSIs where they are not currently installed. These may be limited as a majority of operators and providers indicate they already comply with the proposed requirements.

Indicative Regulatory Impacts per year

Regulatory Benefits

The Monash University Public Transport Amenity Values report suggests that improved provision of directional TGSIs has the potential to increase amenity for public transport users by:

- 1.07 in-vehicle time minutes for buses, coaches and tram / light rail

A 10 per cent uplift of amenity for overall floor-surfacing was assumed for where directional TGSIs are installed. The benefit has been adjusted to account for the small proportion of the network that requires upgrade and the number of users that would be affected.

Given the BCR is greater than 1.0, regulatory reform in this area is estimated to result in a net benefit relative to the status quo.

Regulatory Costs

The table below outlines the impact of implementing the regulatory option for TGSIs.

Table 35: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$0.2	\$0	\$0	\$0.2
Total over 20 years, by sector*	\$3.7	\$0	\$0	\$3.7

**The costs in Table 35 above have been determined based on the assumption that this regulatory change would be applied retrospectively over a compliance schedule. The annual total by sector is the average cost per year over the implementation timeframe of 20 years. Costs may be reduced or avoided if a longer schedule is applied to these requirements or if these requirements are not applied retrospectively.*

It is assumed based on stakeholder input that 0.5 per cent of bus, coach and tram/light rail sites are non-compliant with the proposed regulation regarding directional TGSIs (refer to [Appendix B](#)). This is consistent with consultation submissions which indicated a majority of operators and providers already adhere to the proposed regulatory requirements for the design and implementation of directional TGSIs. However, where directional TGSIs are not installed at all or to the requirements proposed in the regulatory option, the benefits for people with disability are significant as reflected in the BCR of 6.4.

Train stations were not included in this analysis, as stakeholder advice indicated that TGSIs in train stations would be covered by the Premises Standards, and it was therefore assumed they would not be impacted by any changes to the Transport Standards.

Through consultation with stakeholders in the CBA process it was determined that an average of 3 meters of directional TGSIs would be required per site and that this would result in a cost of \$648 per non-compliant site, that is approximately \$216 per meter of directional TGS installation. There is no incremental maintenance cost assumed with this reform and no incremental cost associated with end-of-life renewal.

It should be noted however, that a submission to the Consultation RIS identified it would cost approximately \$800 per meter to replace (rather than install) warning TGSIs. This highlights the varied costs of implementing TGSIs that take into account the type, installation versus replacement (which could include rectification to surfaces) and other factors such as material. Depending on the circumstances, the costs incurred by operators and providers may be greater than estimated.

5.14.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option for tactile ground surface indicators is the **regulatory option**.

The majority of responses supported amendments that would promote consistency and better outcomes in relation to use and placement of directional TGSIs. It is broadly acknowledged the current requirements and guidelines are inadequate to assist operators and providers to effectively use and install directional TGSIs, with many operators and providers indicating they already adhere to the prescriptive elements proposed in the regulatory option.

Whilst non-regulatory guidance may assist operators and providers, it would not resolve the issues with the existing gaps and uncertainty in regulation identified by stakeholders. Further, regulating requirements for directional TGSIs would also safe-guard best practice and prevent any future dis-benefit. That is, any changes by operators and providers that could result in decreased accessibility in the future is prevented by implementation of the reform.

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability as reflected in the impact analysis and the resulting **Benefit-Cost Ratio of 6.4**.

This option has an estimated net regulatory cost of **\$3.7 million over 20 years**.

Case Study – Nilah has low vision and uses a cane to help her navigate when walking. Nilah’s job takes her to different locations across the city each day and she uses public transport to get where she needs to go.

Status Quo – Nilah’s experience today

Nilah arrives at a busy inner city bus station during morning peak hour where new directional TGSIs have been hastily laid in order to be ready for use. However, while trying to navigate the TGSIs Nilah finds they accidentally lead her to the middle of the station where she becomes confused and unsure of which way to proceed. Nilah has to find a staff member to assist her to locate the right service. The use of TGSIs in this station leads Nilah to start using a taxi service instead to avoid getting lost and feeling confused.

Preferred option – Nilah’s experience under the proposed regulations

Nilah arrives at a busy inner city bus station during morning peak hour where new directional TGSIs have been carefully and consistently laid. Although the station is busy, Nilah navigates along the TGSIs to the correct bus service and boards the bus. The reassurance that the new layout provides fills Nilah with confidence to continue using that bus station no matter what time of day.

5.14.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

For directional tactile ground surface indicators, the assumption for the CBA was that public transport operators and providers would be 25 per cent at five years, 55 per cent at 10 years, 90 per cent at 15 years and 100 per cent 20 years as per Schedule 1 (TGSIs).

5.15 Passenger Loading Areas

5.15.1 Problem and options

Taxis, ride share services and private transport vehicles provide an integral role in connecting people.

The Transport Standards facilitate the delivery of accessible facilities and infrastructure. However, the provisions do not extend to enabling passengers to safely arrive, depart, unload, load and move throughout the public transport precincts via passenger loading areas. Environments with insufficient amenity for passengers to feel safe can limit their participation in the community.

Generally, a lack of access to safe loading areas can be a problem, especially for wheelchair accessible taxis (WATS). The lack of appropriate drop off areas are also problematic and often dangerous. For instance, mobility aid users are often dropped off on kerbs or roadways at busy intersections due to unavailability of appropriate kerb access.

Table 36: Summary of Options for Passenger Loading Areas

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Provide additional guidance through expanding Sections 3.3.5 and 3.5.6 in the Whole Journey Guide to provide more specific detail on accessible passenger loading areas to ensure best practice with a whole-of-journey approach.
Regulatory	<p>A regulatory change to the current Transport Standards requirements to provide more specific detail on accessible passenger loading areas, as well as updating the Transport Standards Guidelines to ensure consistency with the new Transport Standards requirements.</p> <p>Three sub-options for the number of taxi rank spaces that must be accessible have been identified:</p> <p><u>Sub-option 1</u> – The first and last taxi rank space must be accessible.</p> <p><u>Sub-option 2</u> – The first, second and last taxi rank space must be accessible.</p> <p><u>Sub-option 3</u> – The first and last taxi rank, as well as one space for every four spaces between the first and last space where there are more than 5 spaces, must be accessible.</p>

5.15.2 Consultation Findings

Overall, responses to the Consultation RIS highlighted the importance of passenger loading areas in providing safe and accessible access to public transport. There was a mixture of responses to the preferred option in the Consultation RIS. Individuals, disability organisations and government broadly supported the regulatory proposal, with some proposing amendments to specific elements. Industry generally supported a non-regulatory approach, noting the importance of clearly stated design principles but citing the need for flexibility to accommodate the diverse settings that passenger loading areas are located. Answers to the preferred sub-option question varied across stakeholders.

Responses from disability organisations and service operators frequently cited improper passenger loading areas being a cause of frustration and a barrier to accessing public transport facilities. There was common criticism regarding the lack of mandated design, creating challenges when egressing, including navigation impediments resulting from some passenger loading areas not having ramp access over kerbs or space to load wheelchairs at rear of vehicles. Some submissions shared frustrations that the insufficient provision of accessible spaces within passenger loading areas contributes to this issue.

There needs to be far more ramps for [wheelchairs] to access the rear loading position of a [wheelchair] accessible taxi, [and] also far more dedicated [wheelchair] loading areas on every rank.

Anonymous, operator and provider survey respondent

Another operator noted the consequences that insufficient provision of accessible passenger loading areas can have, resulting in people with disability being placed in unsafe or inconvenient locations.

Sometimes double park which is unsafe and may incur a penalty notice and result in being fined. Or the need to unload/load at a location some distance [from] where the clients want to attend an appointment.

Anonymous, operator and provider survey respondent

Likewise, submissions from disability organisations and the community also referenced safety issues resulting from poor signage, colour markings and lighting to assist users with vision impairments. Several responses noted that inconsistency of design between jurisdictions and modes of transport was a source of anxiety for some travelers. These responses emphasised the importance of defining passenger loading areas in the Transport Standards, particularly as a component of the 'whole of journey' approach. Detailed design requirements listed in the regulatory option were argued as important to provide clarity for operators and providers and certainty for passengers with disability.

The current situation of uncertainty, inconsistency and unpredictability is causing needless anxiety and stress for passengers when they are planning or undertaking a journey that involves the use of taxis to arrive at or leave airports and other public transport infrastructure.

Vision Australia

Responses from industry and government were mixed, with some preferring the non-regulatory option and some preferring the regulatory option with amendments. Operators and providers generally agreed that passenger loading areas should be defined under Transport Standards, but noted that further distinction should be made between passenger loading zones for private vehicles and taxi ranks. As a result of feedback, the definitional component of both the non-regulatory and regulatory option has been amended to more clearly articulate that passenger loading areas are also used by private transport, in addition to public transport conveyances such as taxis. Some submissions from operators and providers also emphasised the importance of 'future proofing' the definition of passenger loading areas to include other point to point public transport service providers. It should be noted that investigation and consideration of other point to point public transport services, including rideshare, is currently underway as part of the Stage 2 reforms. These responses noted the importance of providing greater access to accessible passenger loading areas.

Submissions that supported the non-regulatory option frequently noted concerns regarding the prescriptive nature of requirements in the regulatory option being unfeasible in some locations. A range of external factors were noted as barriers to compliance with some of the specific access provisions listed in the regulatory option included in the Consultation RIS. Geographical constraints, for example, were noted as a barrier to achieving requirements related to the location of passenger loading areas. The inflexibility of the regulatory option to accommodate these considerations was presented as a justification for pursuing the non-regulatory option.

Two of the specific access provisions put forward in the Consultation RIS were noted to be inappropriate for inclusion in the Transport Standards. Responses suggested that these elements, which reference Australian Standards AS2890.5-2020 and AS/NZ2890.6-2009 specify requirements for the provision of off-street and on-street parking facilities, are therefore inappropriate in the context of passenger loading areas. Consequently, responses suggested these requirements should be removed from the specific access provision requirements of the non-regulatory and regulatory options. It should be noted, however, that these standards contain valuable design information regarding disability parking spaces – for example, dimensional requirements – and therefore certain clauses of the standards are of direct relevance to passenger loading areas. For this reason, the regulatory option has been amended to only include references to specific clauses of the standards related to disability parking spaces, rather than mandating compliance with the entirety of the standard.

Some responses from government and industry shared similar concerns regarding the overly prescriptive nature of certain specific access provisions, and instead suggested amendments to the regulatory option that provided both regulatory clarity and the flexibility to implement design requirements on a case by case basis through guidance material in The Whole Journey Guide. These suggestions have been included as amendments in the regulatory option.

5.15.3 Impact Analysis

Status Quo Option

This option maintains the status quo with no changes to the current Transport Standards and no new guidance material is issued.

Passenger loading areas, such as drop off/pick up points and taxi ranks will continue to not be specifically addressed in the Transport Standards. However, there is an inference that loading areas need to be accessible by applying the boarding points and kerb requirements in Section 8.1 of the Transport Standards.

As taxis are a conveyance that falls within the application of the Transport Standards, any passenger loading areas used by taxis, such as drop off/pick up points and taxi ranks, should be accessible.

Eliminating Discrimination

The status quo will not address discriminatory outcomes that are currently occurring. People with disability will continue to experience the issues outlined in the problem statement.

Key Impacts

- There will be a lost opportunity to better define the design requirements for passenger loading areas to address the known issues raised through the consultation process.
- As there are no specific details on what constitutes an accessible passenger loading area, inconsistent and poor accessibility outcomes will remain.
- Safety concerns associated with inaccessible passenger loading areas will remain.
- There are no additional costs estimated.

Impacted Parties

Individuals

People with disability will continue to experience uncertainty regarding the safety of passenger loading areas. Inconsistency in the provision of accessible passenger loading areas may continue to act as a barrier to travel.

Operators and Providers

Operators and providers will continue navigate uncertainty regarding best practice design for passenger loading areas.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

The non-regulatory option would result in expanding Sections 3.3.5 and 3.5.6 in The Whole Journey Guide to provide more specific detail on accessible passenger loading areas to ensure best practice with a whole-of-journey approach.

The Whole Journey Guide includes sections on drop off/pick up points (Section 3.3.5) and taxi facilities (Section 3.5.6). These sections have limited content and it may be appropriate to include more specific access provisions as outlined below.

Passenger loading areas definition

Various terms are used for passenger loading areas such as drop off/pick up points, kiss and ride facilities and taxi facilities.

Passenger loading areas are to be defined as vehicle spaces serving public transport facilities where passengers can embark or disembark from private transport, taxis and ride share vehicles. The definition to acknowledge that passenger loading areas includes both drop off/pick up points (that are also known as kiss-and-ride areas) and taxi ranks, whereby private vehicles, taxis and ride share vehicles can all utilise drop off/pick up points. The definition to also acknowledge that taxi ranks can be provided in addition to drop off/pick up points that are exclusively used by taxis.

Specific access provisions for passenger loading areas

- If a single drop off/pick up point is provided to serve a public transport facility or precinct, it should be accessible, and if more than one drop off/pick up point is provided, at least one should be accessible.
- If a taxi rank is provided at a public transport facility or precinct, passengers should be able to embark or disembark from dedicated accessible taxi rank spaces. There are several options concerning the extent of access that need to be considered for taxi ranks, such as:
 - The first and last taxi rank space should be accessible.
 - The first, second and last taxi rank space should be accessible.
 - The first and last taxi rank space, as well as 1 space for every 4 spaces between the first and last space where there are more than 5 spaces, should be accessible.
- If a passenger loading area is provided, an accessible drop off/pick up point or accessible taxi rank should:
 - Be within direct proximity of a main pedestrian entry point of a public transport facility and any other interconnecting public transport boarding area. There are several options proposed regarding defining 'direct proximity', such as outlining that passenger loading areas should be located within a direct line of sight or within a certain distance.

In terms of distance, some guidance can be taken from the table in clause 7(e) of AS1428.2-1992 that lists the ability of people with disabilities moving certain distances. Based on this table, a distance of 18 metres would suit 85 per cent of people with disability – this could be a reasonable consideration to cover for most people with disability.
 - Be located adjacent to a firm and level boarding area that joins an access path which links to a main pedestrian entry point of a public transport facility and any other interconnecting public transport boarding area.
 - Be arranged to avoid the need for passengers to cross any public road, private vehicular way or car park aisle to reach a main pedestrian entry point of a public transport facility and any other interconnecting public transport boarding area.
 - Accessible spaces within an on-street passenger loading area must conform to the requirements for disability parking spaces as per AS2890.5-2020 Clause 4.5.2 (a), (b), (c) and (f).
 - Avoid having on-street passenger loading areas on main roads with a preference to using service lanes, side streets or utilising off-street passenger loading areas where practicable. This is to accommodate the need for some people with disability who need assistance to embark or disembark and minimise hazards for many people who would be very vulnerable near busy roads, especially for people using mobility devices who would be below the line of sight of drivers travelling past a passenger loading area.
 - Accessible spaces within an off-street passenger loading area must conform to the requirements for disability parking spaces as per AS/NZ2890.6-2009 Clause 2.2, 2.3, 2.4 and 2.5.
 - Include warning TGSIs along the entire length of the passenger loading area as per clause 2.5 of AS/NZS1428.4.1-2009 where it joins a passenger loading area at grade (i.e. on the same level) or has a kerb or level change less than 150 mm.

- Include warning and directional TGSIs to indicate its location from a main pedestrian entry point of a public transport facility and any other interconnecting public transport boarding area or other suitable passive guidance measures.
- Include a kerb ramp as per Clause 10.7 of AS1428.1-2009 where a pedestrian area is delineated with a kerb or level change, whereby the kerb or level change must not exceed 190 mm high.
- Be identified with the international symbol of access, with directional wayfinding signage, and with the international symbol along the access paths to a main pedestrian entry point of a public transport facility and any other interconnecting public transport boarding area.

It is likely that in many cases passenger loading areas may need to be located on private or local government-controlled land. This can present difficulties for operators as they may not have complete control to achieve the desired outcome and consent will be required from owners to make changes to their asset. Although this could be problematic, this is already a reality as a result of some existing Transport Standards requirements.

For example, Section 2.2 of the Transport Standards requires an access path to comply with Clause 7 of AS1428.2-1992. One part of this clause states that *an accessible paths of travel within the boundary of the site shall be provided from transportation stops, accessible parking and passenger loading zones, and public streets or walkways to the accessible building entrance they serve.*

Following feedback through the Consultation RIS, the features for this option have been refined. The major deviations from the Consultation RIS are:

- The definitional component of the option has been amended to more clearly articulate that passenger loading areas are also used by private transport, in addition to public transport conveyances such as taxis.
- Two specific access provisions put forward in the Consultation RIS have been amended. Feedback received from stakeholders stated that these elements are inappropriate for inclusion in entirety as they reference Australian Standards relevant to parking facilities, not passenger loading areas. To ensure design requirements for accessible parking spaces are included in the option, these specific access provisions have been amended to only include references to specific clauses of the standards related to disability parking spaces, rather than mandating compliance with the entirety of the standard.

Eliminating Discrimination

The non-regulatory approach will assist operators and providers to reduce discriminatory outcomes.

To the extent that guidance is followed, discrimination against people with disability will be reduced by ensuring passenger loading areas are designed and implemented with consideration of accessibility requirements, increasing safety and providing greater access to public transport infrastructure.

The level of reduction of discrimination is scalable and cannot be guaranteed due to the discretionary nature of the option.

Key Impacts

- Passenger loading areas designed as per The Whole Journey Guide would ensure that accessibility would be maximised, as well as ensuring consistency with the intent of the *Disability Discrimination Act 1992* (DDA) to eliminate discrimination.
- To the extent that guidance is adopted, access provisions would provide greater certainty that passenger loading areas also comply with existing Transport Standards requirements and are fit-for-purpose. The benefits will only be realised to the extent that operators and providers implement the guidance.
- Provide clarity regarding the remit of passenger loading areas.

Impacted Parties

Individuals

People with disability would benefit from increased confidence that passenger loading areas will be designed safely and to be fit-for-purpose to ensure access from loading areas to public transport infrastructure is accessible. Due to the discretionary nature of this option, it does not provide certainty to people with disability that passenger loading areas will be designed in accordance with best practice universal design principles. A lack of consistency across jurisdictions may hinder the confidence of people with disability to use public transport.

Operators and Providers

Operators and providers will benefit from improved guidance which provides clarity regarding best practice design principles to ensure passenger loading areas are accessible for people with disability. To the extent that guidance is adopted, operators and providers may incur costs associated with upgrading passenger loading areas to meet compliance. Costs will only be incurred to the level that operators and providers implement the guidance. Operators and providers will be able to manage the implementation (and related costs) to suit their operational requirements, including through staging the implementation.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

The Transport Standards would be amended to provide more specific detail on accessible passenger loading areas, as well as updating the Transport Standards Guidelines to ensure consistency with the new requirements.

As a result, the following requirements are proposed in relation to passenger loading areas:

Passenger loading area definition

Passenger loading areas are to be defined as vehicle spaces serving public transport facilities where passengers can embark or disembark from private transport, taxis and ride share vehicles. The definition to acknowledge that passenger loading areas includes both drop off/pick up points (that are also known as kiss-and-ride areas) and taxi ranks, whereby private vehicles, taxis and ride share vehicles can all utilise drop off/pick up points. The definition to also acknowledge that taxi ranks can be provided in addition to drop off/pick up points that are exclusively used by taxis.

The specific access provisions to be adopted that define appropriate success for passenger loading areas are:

- If a single drop off/pick up point is provided to serve a public transport facility or precinct, it must be accessible, and if more than one drop off/pick up point is provided, at least one must be accessible.
- If a taxi rank is provided at a public transport facility or precinct, passengers must be able to embark or disembark from dedicated accessible taxi rank spaces.
- If a passenger loading area is provided, an accessible drop off/pick up point or accessible taxi rank must:
 - Be located adjacent to a firm and level boarding area that joins an access path which links to a main pedestrian entry point of a public transport facility and any other interconnecting public transport boarding area.
 - Accessible spaces within an on-street passenger loading area must conform to the requirements for disability parking spaces as per AS2890.5-2020 Clause 4.5.2 (a), (b), (c) and (f).
 - Accessible spaces within an off-street passenger loading area must conform to the requirements for disability parking spaces as per AS/NZ2890.6-2009 Clause 2.2, 2.3, 2.4 and 2.5.
 - Include warning TGSIs along the entire length of the passenger loading area as per Clause 2.5 of AS/NZS1428.4.1-2009 where it joins a passenger loading area at grade (on the same level).

- Include a kerb ramp as per Clause 10.7 of AS1428.1-2009 where a pedestrian area is delineated with a kerb or level change, whereby the kerb or level change must not exceed 190 mm high.

Three sub-options for the number of taxi rank spaces that must be accessible were proposed in the Consultation RIS:

Sub-option 1 - The first and last taxi rank space must be accessible.

Sub-option 2 - The first, second and last taxi rank space must be accessible.

Sub-option 3 - The first and last taxi rank space, as well as 1 space for every 4 spaces between the first and last space where there are more than 5 spaces, must be accessible.

Based on feedback and impact analysis, sub-option 1 is the recommended option. Limited specific feedback was provided during consultation regarding the preferred sub-option. The provision of accessible taxi rank spaces in accordance with sub-option 1 will provide a consistent level of accessibility at passenger loading areas.

Following feedback through the Consultation RIS, the features for this option have been refined. Major deviations from the Consultation RIS are:

- The definitional component of the regulatory option has been amended to more clearly articulate that passenger loading areas are also used by private transport, in addition to public transport conveyances such as taxis.
- Feedback received stated that several elements of the specific access provisions in the proposed regulatory option were overly prescriptive, and in some cases, unachievable. For this reason, the specific access provisions outlined in 3a, 3c, 3e, 3h and 3j of the regulatory option put forward in the Consultation RIS will instead be included as guidance in The Whole Journey Guide.
- Two specific access provisions put forward in the Consultation RIS have been amended. Feedback received from stakeholders stated that these elements are inappropriate for inclusion in entirety as they reference Australian Standards relevant to parking facilities, not passenger loading areas. To ensure design requirements for accessible parking spaces are included in the option, these specific access provisions have been amended to include references to specific clauses of the standards related to disability parking spaces, rather than mandating compliance with the entirety of the standard.

It is likely that in many cases passenger loading areas associated with public transport services may need to be located on private or local government-controlled land. This can present difficulties for operators and providers as they may not have complete control to achieve the desired outcome.

For example, a new train station replacing an old facility could have a drop off/pick up area adjacent to the train station in a council-owned car park where the train service provider is also seeking to upgrade the drop off/pick up area as part of the new works. As the drop off/pick-up area is within council owned land, consent will be required from council to make changes to their asset. Although this could be a problematic situation, this is already a reality with some parts of the current Transport Standards. For example, Section 2.2 of Transport Standards requires an access path to comply with Clause 7 of AS1428.2-1992. One part of this clause states *Accessible paths of travel within the boundary of the site shall be provided from transportation stops, accessible parking and passenger loading zones, and public streets or walkways to the accessible building entrance they serve.*

As per the current Transport Standards requirements, there needs to be an access path from the entrance of public transport building to various elements, including passenger loading areas.

Eliminating Discrimination

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability.

By providing regulatory clarity and mandating design requirements, passenger loading areas will provide unbroken access to public transport infrastructure, connecting passengers with disability to public transport infrastructure. Likewise, design requirements in the specific access provisions will ensure that passenger loading areas adhere to appropriate specifications and with adequate safety measures to ensure the safety of people with disability when entering or exiting public transport infrastructure.

Key Impacts

- Updating the Transport Standards to include enhanced passenger loading areas will provide a clear regulatory framework to better help eliminate discrimination for people with disability using public transport.
- The Transport Standards Guidelines would be updated for consistency of terminology and to supplement the new Transport Standards requirements.
- Clear design standards would be provided, providing clarity to operators and providers and certainty to people with disability.

The cost-benefit analysis for reforms to passenger loading areas returned a **Benefit-Cost Ratio of 1.9** (detail below).

Impacted Parties

Individuals

People with disability will benefit as mandated access provisions will ensure best practice in design and maximise accessibility outcomes, resulting in improved access to public transport infrastructure. Consequently, individuals may also benefit from reduced time loss, reduced injuries, increased confidence and independence.

Operators and Providers

Operators and providers will benefit from enhanced certainty that passenger loading areas (both drop off/pick up points and taxi ranks) meet the Transport Standards requirements and help to ensure consistency of accessible passenger loading areas. Operators and providers would bear implementation and installation costs to adhere to the new requirements. If operators and providers are required to retrofit existing passenger loading areas, these costs could be significant.

Indicative Regulatory Impacts per year

Regulatory Benefits

The Monash University Public Transport Amenity Values report suggests that improved provision of passenger loading areas has the potential to increase amenity for public transport users by:

- 1.02 in-vehicle time minutes for trains, ferries and airports

For stations, terminals and airports with kiss-and-ride facilities, the amenity benefit was related to step free access and the full benefit was included. The number of affected users was amended to reflect the proportion of transport networks that provide these facilities and that an average of 10 per cent of public transport passengers use these facilities. Safety benefit was assumed to result in a 2 per cent reduction in the number of slips, trips and falls.

Given the BCR is greater than 1.0, regulatory reform in this area is estimated to result a net benefit relative to the status quo.

Regulatory Costs

The table below outlines the regulatory impact of implementing the regulatory option for passenger loading areas.

Table 37: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$0.6	\$0	\$0	\$0.6
Total over 20 years, by sector*	\$11.0	\$0	\$0	\$11.0

**The costs in Table 37 above have been determined based on the assumption that this regulatory change would be applied retrospectively over a compliance schedule. The annual total by sector is the average cost per year over the implementation timeframe of 20 years. Costs may be reduced or avoided if a longer schedule is applied to these requirements or if these requirements are not applied retrospectively.*

The cost-benefit analysis was based on the assumption that 50 per cent of train stations and 10 per cent of ferry terminals contained kiss-and-ride facilities, with installation per the selected sub-scenario requiring installation of 3 kerb ramps per loading area. Airports were also included in this assumption, with an average of 5 loading areas per airport. It was conservatively assumed that no sites across trains, ferries, and airports were compliant with the requirement of 3 accessible loading areas (refer to [Appendix B](#)).

The cost of passenger loading areas was determined through stakeholder consultation and was assumed to be consistent across modes at approximately \$2,000 per kerb ramp. There is no assumed maintenance cost. Further, upon upgrade of passenger loading areas, there is no incremental cost assumed of installing a kerb ramp compared to not installing a kerb ramp.

5.15.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option is the **regulatory option, sub-option 2**.

All submissions from the disability community and some responses from operators and providers supported the regulatory option, and highlighted that mandating design requirements is necessary to ensure the safety of passengers with disability. Responses that favoured the non-regulatory option reiterated the importance of best practice design in promoting a safe and accessible journey for passengers with disability, but noted that some elements of the regulatory option were overly prescriptive. The regulatory option has been amended based on feedback from consultation to find a balance between the two perspectives shared.

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability as reflected in the impact analysis.

The cost-benefit analysis for reforms to passenger loading areas returned a **Benefit-Cost Ratio of 1.9**.

This option has an estimated net regulatory cost of **\$11 million over 20 years**.

Case Study – Ahmoud is a paraplegic and is wheelchair bound. Ahmoud’s daily journey to work includes travel in a wheelchair accessible taxi (WAT).

Status Quo – Ahmoud’s experience today

Ahmoud alights from his train and out of the station to the nearest taxi rank to find a dedicated WAT space to safely board a vehicle to finish his journey to work. Unfortunately, the only available accessible space is being utilised by other taxis. Ahmoud has to navigate the busy sidewalks to seek another accessible rank/passenger loading area with an accessible kerb in order to safely board but has to wait for a WAT to arrive. Ahmoud is frustrated especially as he has arrived at work over 30 minutes late.

Preferred option – Ahmoud’s experience under the proposed regulations

Ahmoud alights from his train and out of the station to the nearest taxi rank to find a number of available WATs stationed in dedicated accessible spaces that allow safe kerb access and sufficient room to safely access the vehicle via the rear door to finish his journey to work. Ahmoud arrives at his workplace that also provided sufficient dedicated loading areas for safe unloading and access to the footpath. Ahmoud has arrived to work on time without delay or disruption. Ahmoud feels relaxed to start his day.

5.15.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

The proposed changes to passenger loading areas will represent a new requirement in the Transport Standards. The assumption for the CBA was that public transport operators and providers would be 25 per cent compliant at five years, 55 per cent compliant at 10 years, 90 per cent compliant at 15 years, and 100 per cent compliant at 20 years.

5.16 Provision of Information in Multiple Formats

5.16.1 Problem and options

Public transport operators and providers are increasingly using websites, smartphone applications (apps) and online systems to communicate either static or dynamic service information to customers. These systems offer flexibility in messaging whilst quickly providing substantial amounts of information to passengers compared to traditional information formats available on transport conveyances and within transport precincts. Online systems have a particular benefit for passengers in being able to allow for pre-journey planning from anywhere at any time.

The Transport Standards do not address online information; however, they do make references to providing information in a customer's 'preferred format'. Section 27.1 of the Transport Standards requires general information about transport services to be accessible to all passengers.

Despite advances in technology and adoption of online systems and apps, not all customers have access to or the ability to use these systems. People with cognitive disabilities are particularly disadvantaged by their ability to access technology as a result of either financial or literacy barriers. Therefore, it is important that people with disability are not further disadvantaged by not being able to access public transport service information that is provided solely through online systems.

The current Transport Standards do not provide clarity for operators and providers about what their obligations are in relation to providing information about transport services, nor do they provide certainty for people with disability that information will be available in multiple formats other than online systems and apps.

Table 38: Summary of Options for Provision of Information in Multiple Formats

Option	Description
Status Quo	No change is made to the current Transport Standards text and no new guidance issued.
Non-regulatory	Additional guidance and expanded informative material would be included in The Whole Journey Guide to provide advice on the range of formats public transport information needs to be provided to people with disability.
Regulatory	Mandatory performance elements would be included in the Transport Standards which includes requirements for the provision of information in multiple formats and the types of transport information this would be applicable to as a minimum.

5.16.2 Consultation Findings

Submissions from all groups broadly agreed that the provision of information through multiple formats, including non-digital formats, was an important accessibility issue that needs to be addressed.

[There is a] *genuine customer need for information to be provided through non-digital channels.*

NSW Government

Submissions from the disability sector strongly supported the provision of information in multiple formats, with all responses providing support for the regulatory option. These submissions argued that access to information is crucial to enable people with disability to undertake public transport journeys. In order to access this information, it must not be exclusively provided through digital or online formats as many people with disability do not use mobile phones, do not find mobile phone applications accessible, or they are not able to navigate websites. As such, they need information in other formats to be able to use public transport.

No one mechanism for communication will suit all disability cohorts.

National Inclusive Transport Advocacy Network

Submissions from industry and governments cited concerns about costs associated with providing information in alternative formats, however most reported as a result of their current processes, they would be compliant with the proposed reforms. Most submissions from industry and government supported the proposed regulatory elements, as they offer flexibility to provide information as passengers need, without prescribing specific formats which might become obsolete or may not reflect the needs of the individual to convey particular information. However, one submission stated they would prefer that the range of formats information needs to be provided in should be clearly articulated. Submissions also reported that the proposed regulatory elements would clarify the exact requirements for operators and providers to ensure they are able to meet their obligations and improve outcomes for passengers.

Provisions which prescribe the formats in which information should be provided may become redundant in the face of technological advancements.

NSW Government

5.16.3 Impact Analysis

Status Quo Option

Transport Standards requirements for the provision of information remain unchanged. The current standards do not address online information however do make reference to providing information in a customer's 'preferred format'.

The status quo will not address discriminatory outcomes that are currently occurring. People with disability will continue to experience issues outlined in the problem statement, such as being unable to access service information in a format that suits them. Operators and providers will continue to have unclear regulatory requirements and lack guidance on provision of information, decreasing their ability to ensure their policies are not discriminatory.

Eliminating Discrimination

The status quo will not address discriminatory outcomes that are currently occurring. People with disability will continue to experience the issues outlined in the problem statement.

Key Impacts

- The opportunity cost of maintaining the status quo is a lost opportunity to address issues associated with the current Transport Standards and not provide any additional guidance for operators and providers.
- This option would not prevent future dis-benefit if operators change their policies to only provide information online.
- Operators and providers will only be required to provide information in a preferred format, which may result in operational costs depending on policies implemented by different operators and providers.
- There are no additional costs associated with this option for operators and providers.

Impacted Parties

Individuals

People with disability may be disadvantaged if they do not have access to or cannot use online technology and cannot get information in alternative formats. This may deter or prevent them from using public transport.

Operators and Providers

Operators and providers may continue to increase the use of websites, smartphone apps and other online systems to communicate service information to customers without providing this information in other formats.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the status quo option.

Non-regulatory Option

The Whole Journey Guide will be updated and consolidated to clearly articulate the range of formats public transport information needs to be provided to people with disability. The following information would formulate guidance:

- Currently, information about accessibility options is not always easy to find on transport and infrastructure provider websites. Communicating the availability of journey planning tools and assistance is an important whole-of-journey consideration.
- Links to information and journey accessibility planning tools and assistance can be improved by these being consistently located on service and infrastructure providers' websites. User testing by people with disability should always be a design consideration in relation to online information.
- It is recommended that information be provided in multiple formats to address the accessibility requirements of all users, and will need to include both technology based and more traditional formats. This will ensure that those who may not be able to access websites have general information available to them. General information includes but is not limited to timetables, routes, fare, payment methods, next stop information, next service information.
- Simplicity is important for all users, but particularly for people who may have difficulty reading, who are deaf, those with a cognitive disability or those from non-English speaking backgrounds.

Eliminating Discrimination

The non-regulatory approach will assist operators and providers to reduce discriminatory outcomes, but will not provide an adequate opportunity to reduce discrimination.

People who do not or cannot access information through online or digital means should be able to access service information they need if operators and providers follow guidance. This would ensure they can use public transport confidently and independently. Guidance for the provision of information may help to ensure operators and providers do not solely rely on online and digital formats to provide service information.

If guidance is not followed, increased accessible forms of information may not be achieved and there may be a risk of reduced accessibility if operators and providers change their policies in the future. Additionally, as the guidance is discretionary, it will not offer certainty that operators and providers will continue to provide information offline.

Key Impacts

- As the guidance is not mandatory, operators and providers will have flexibility in how they implement the advice to suit situational and organisational needs, however some operators and providers may not follow this guidance.
- Members of the disability community will have greater access to information as far as the guidance is followed, particularly those who do not use smartphones or do not use websites.
- Costs will depend on the extent that guidance is implemented, and the policies the operator or provider uses to meet the guidance.
- Producing alternative formats for online material such as timetables or documents on an as needs basis is not costly whereas larger scale implementation of alternative information has a higher cost.

Impacted Parties

Individuals

People with disability will have greater access to information about public transport services, which will increase their ability and confidence to use public transport services, particularly those services which they are not familiar with. Access to information will also allow people with disability to increase their ability to undertake public transport journeys, and may result in increased participation in the workforce and the community.

Operators and Providers

Operators and providers may have to make changes to their policies relating to the provision of information if they do not already meet the guidance and would like to increase the accessibility of their information provision. They may be better able to develop policies that are compliant with Transport Standards requirements whilst addressing passenger needs.

Indicative Regulatory Impacts per year

There is no estimated regulatory burden for the non-regulatory option.

Regulatory Option

The proposed regulatory option calls for the inclusion of mandatory prescriptive and performance requirements in the Transport Standards concerning alternative formats that must be used to provide information to customers. The Transport Standards currently includes a provision which requires ‘general information about transport services must be accessible to all passengers’ (Section 27.1).

A new section will be added to the Transport Standards to require that online information is not the sole means of information provision.

The Transport Standards would specify additional requirements that allows for the provision of multiple formats and to what types of transport information this would be applicable to as a minimum. These include:

- General information for transport services cannot solely be provided in an online format such as a website.
- General information includes but is not limited to timetables, routes, fare, payment methods, next stop information, next service information.

The Transport Standards Guidelines would be amended to reflect and provide further advice on the new requirements.

Eliminating Discrimination

The regulatory option provides the greatest opportunity to reduce discrimination against people with disability.

Regulatory requirements and guidance on the provision of information should help to ensure operators and providers do not solely rely on online and digital formats to provide service information. People who do not access information through online or digital means will be able to access service information they need and want, ensuring they can use public transport confidently and independently.

Key Impacts

- Members of the disability community will be certain they can access information in an accessible format, particularly those who do not use smartphones or those who cannot navigate webpages.
- Operators and providers will have clarity as to their obligations for the provision of information to members of the public.
- Operators and providers may have to introduce new policies to provide information in different formats.
- Transport providers indicate that costs vary depending on the type of information, the format and delivery. The provision of complex information, such as timetables is costlier than simple service related information. In some situations, direct assistance may be the most effective way to comply with the requirements.
- Producing alternative formats for online materials such as timetables or documents on an as needs basis will increase costs for operators and providers.
- Larger scale implementation of alternative format information at stations or on-board conveyances would have a higher cost.

Impacted Parties

Individuals

People with disability will be assured they can access information about public transport services without requiring a smart device. Access to information will also allow people with disability to increase their ability to undertake public transport journeys, and may result in increased participation in the workforce and the community.

Operators and Providers

Operators and providers may have to make changes to their policies relating to the provision of information if they do not already meet the requirements, however they will have clear regulations to follow to comply with the existing requirements in the Transport Standards.

Indicative Regulatory Impacts per year

Regulatory Benefits

The primary benefit of the proposed reform is the prevention of future dis-benefit. That is, any changes by operators and providers that could result in decreased accessibility in the future is prevented by implementation of the reform. As it is assumed that all operators and providers are compliant, there is no immediate benefit to the proposed reform.

There is no Benefit-Cost Ratio for this option or costs associated with the proposed reforms. CBA survey responses indicated that states and territories currently provide information in formats other than online.

Regulatory Costs

There are no costs associated with these reforms as CBA survey responses indicated that states and territories currently provide compliant information in formats other than online. This is reflected through submissions as majority of operators and providers either did not provide evidence of cost, or said they were already compliant with the requirements.

The clarity and certainty provided by the new requirements may offset any additional costs incurred in outlying cases. However, the current policies in place by operators and providers should already include the cost of providing accessible information to passengers. Any operators or providers only providing information online currently are likely to be non-compliant with the existing requirement to provide information in an accessible format.

The table below outlines the regulatory impact of implementing the regulatory option for provision of information.

Table 39: Average Regulatory Costs

Change in costs (\$ millions)	Business	Community	Individual	Total change in costs
Annual total by sector	\$0	\$0	\$0	\$0
Total over 10 years, by sector	\$0	\$0	\$0	\$0

5.16.4 Preferred Option

Based on the consultation findings and impact analysis, the preferred option is the **regulatory option**

Consultation findings showed the additional regulatory burden on operators and providers would be minimal, and the new requirements would increase clarity and certainty as to their obligations under the Transport Standards. Those who do not use smart devices or cannot access information online will not be disadvantaged in the future if operators and providers change their information provision policies. Guidance would not avoid cases of future dis-benefit that would

occur if operators and providers decided to only provide information through digital and online means. The regulatory option would ensure the provision of information remains accessible.

This option has **no estimated regulatory cost**.

Case Study – Junko is not used to traveling on public transport and does not use a mobile phone device. Junko is trying to plan a public transport journey.

Status Quo – Junko’s experience today

Junko is in the city centre and is considering taking the bus home for the first time. As Junko doesn’t have a phone, she decides to walk to the bus interchange to seek information. Junko notices some numbered departure points but cannot work out where the buses are leaving from. Looking around, Junko notices signs directing passengers to websites if requiring further information or assistance. Junko feels frustrated and overwhelmed and decides to take a taxi home instead.

Preferred option – Junko’s experience under the proposed regulations

Junko is excited about taking her first bus ride home from the city centre. At the bus interchange, Junko can see numbered departure points, with a visual information display which highlights the destination of each bus service and departure times. Junko waits at the stop for the bus that goes to her neighbourhood and can hear an audio announcement that the bus will be leaving shortly. When getting on the bus, Junko also takes a printed copy of the bus timetable to use in the future.

5.16.5 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

The proposed changes to wayfinding will represent new requirements in the Transport Standards. The assumption for the CBA was that public transport operators and providers would be 100 per cent at five years.

5.17 References to Australian Standards

5.17.1 Problem and Outcome

A number of references to Australian Standards in the Transport Standards have been superseded by the release of new and updated Australian Standards. The aim of this section is to update the Transport Standards to:

- Reference more current Australian Standards in a manner that imparts either no change in material outcome or only minor material changes.
- Align the Transport Standards with the Premises Standards where this gives favourable outcomes and achieves consistency.
- Harmonise language with the *Disability Discrimination Act 1992*.

5.17.2 Consultation Findings

All amendments were supported by submissions, with exception to Part 16, Section 16.2. Two submissions did not support mandating ISO 7001 symbols for all pictograms and illustrations.

Proposed amendments to this section seek to replace references to AS2899.1 (1986) with ISO 7001 (2007). This standard has been in circulation since 2007, and anecdotally most of the symbols included in the standard will already be in use. One submission cited they have developed a suite of co-designed symbols with the disability sector that are currently in use. The cost-benefit analysis found that local variation from strict compliance with ISO 7001 is permitted under the standard where the key elements and design intent of the standardised symbol is not compromised, meaning that the alternative could be retained under the certain circumstances.

Supporting the amendment to Section 16.2 will simplify the regulatory environment and improve consistency for both users and operators / providers.

Some submissions raised concerns regarding the feasibility of adopting certain amended references in relation to existing assets (particularly Sections 12.2, 14.2, and 15.1). Submissions stated that provisions need to be included with any regulatory change on the implementation of the updated references and their application to assets that are considered compliant with the current Transport Standards and subsequent Australian Standards references. These submissions stated that it is imperative that there is clear understanding on the retrospectivity in application of the new Transport Standards on existing compliant assets.

Updating standards to newer references, whilst generally supported, may result in similar discrepancies currently experienced in relation to references to outdated standards in legislation. If this is not addressed in a timely manner, there will be further misalignment and misunderstanding of the requirements in order to comply with both the Premises Standards and the Transport Standards.

All submissions that commented on amendments to references to Australian Standards advocated for references to be replaced by full text in the Transport Standards. Submissions state that this would improve the accessibility of legislation for people with disability, as currently members of the public are required to pay to access Australian Standards.

Submissions supported consolidating Section 21.2 and Section 21.3 to improve clarity.

5.17.3 Proposed Amendments

Table 40: Analysis of Proposed Amendments to Australian Standards

Reference	Changes and ramifications	Impact (from cost-benefit analysis)
Section 2.4 Minimum unobstructed width	Replace reference to AS1428.2 (1992) with text specifying dimensions	No material impact
Section 3.1 Circulation space for wheelchairs to turn in	Update reference from AS1428.2 (1992) Clause 6.2 to AS1428.1 (2009) Clause 6.5 to include specifications for 90-degree turns and to align with the Premises Standards	Is not expected to result in significant costs for new work Requirements for 60-90 degree turns where it is physically constrained or would lead to significant costs would not be justifiable and undue hardship would apply
Section 4.1 Minimum width	Update reference from AS1428.2 (1992) Clause 6.5(a) to AS1428.1 (2009) Clause 6.4	No material impact
Section 6.4 Slope of external boarding ramps	Remove references to AS/NZS3856.1 (1998) Clause 2.1.8(e), AS1428.2 (1992) Clause 8.4.2(a), and AS1428.1 (2001) Figure 8 Requirements are kept in text	No material impact
Section 9.10 International symbol of accessibility to be displayed	Update reference from AS1428.1 (2001) Clause 14.2(c) to AS1428.1 (2009) Clause 8.2.1(c)	No material impact
Section 10.1 Compliance with Australian Standard (Surfaces)	Update references from AS1428.2 (1992) Clause 9 and AS 1428.1 Supplement 1 (1993) Clause C12 to AS1428.1 (2009) Clause 7, to provide more detail on abutment and levels	No material impact
Section 10.2 Slip resistance – premises and infrastructure	Update references from AS1428.2 (1992) Clause 9 and AS1428.1 Supplement 1 (1993) Clause C12 to SA HB 198 (2014) Table 3a and 3b, to cover slip resistance requirements for both indoor and outdoor premises and infrastructure	Although the cost of replacement of surfaces will be significant, stakeholders have reported that there would be less than 100 sites across Australian covered by Transport Standards that would require this work. This is assumed to be representative of the situation across all states and territories. As such, the overall impact associated with this proposed amendment is expected to be relatively low. No data was provided on the cost to upgrade the non-compliant sites. However, a guaranteed uniformity of minimum slip resistance across the entire network will be beneficial in reducing the variability at different stops.
Section 10.3 Slip resistance – conveyances	Update references from AS1428.2 (1992) Clause 9 and AS1428.1 Supplement 1 (1993) Clause C12 to Australian Design Rule 58 – Conveyances, to include slip and	No material impact

	skid resistant surface requirements in conveyances	
Section 11.1 Compliance with Australian Standard – premises and infrastructure	Update reference from AS1428.2 (1992) Clause 10.1 to AS1428.1 (2009) Clause 12 and Clause 11.2, and provide additional text regarding luminance contrast and domed warning indicators	No material impact
Section 11.3 Handrails on steps	Remove reference to AS1428.2 (1992) Figure 5 and replace with text specifying requirements	No material impact
Section 11.4 Handrails above access paths	Update reference from AS1428.1 (2001) Clause 6.1 (c) and Figure 9 to AS1428.1-2009 Clause 12(d) and Figure 29	No material impact
Section 11.5 Compliance with Australian Standard	Update reference from AS1428.2 (1992) Clause 10.2 to AS1428.1 (2009) Clause 17	No material impact
Section 11.7 Compliance with Australian Standard	Update reference from AS1428.2 (1992) Clause 10.2 to AS1428.1 (2009) Clause 17	No material impact
Section 12.2 Compliance with Australian Standard	Update reference from AS1428.2 (1992) Clause 11 to AS1428.1 (2009) Clause 13, to include door circulation dimensions and to align with the Premises Standards	As reported by stakeholders, the cost associated with allowance of additional space to allow for circulation at either side of doors would be in the order of \$1,000. However, stakeholders report that there are not expected to be any known sites covered by the Transport Standards that would require this upgrade as the vast majority of sites are already compliant and the few that are not compliant would face undue hardship and would only be required to implement the standard when a major upgrade of the site is undertaken. This reform would be beneficial in ensuring that new construction conforms to best-practice, with negligible incremental cost.
Section 12.3 Weight activated doors and sensors	Change reference from service animal to <i>assistance animal to align with the Disability Discrimination Act 1992</i>	No material impact
Section 12.4 Clear opening of doorways	Update references from AS1428.2 (1992) Clause 11.5.1 to AS1428.1 (2009) Clause 13.2	No material impact
Section 14.2 Compliance with Australian Standard	Update references from AS1428.1 (2001) Clause 9.1 and 9.2 and AS1428.2 (1992) Clause 13.2, 13.3 and Figures 8 and 9 to AS1428.2 (2009) Clause 11.1 and 11.2, to provide clarity regarding stair setback from an access path and to align with the Premises Standards	No material impact
Section 15.1 Accessible unisex toilet	Update references from AS1428.1 (2001) Clause 10 to AS1428.1 (2009) Clause 15, to increase circulation and clearance spaces around the pan and wash basin, introduce additional safety features, change wash basin location requirements, and to align with the Premises Standards	The cost of compliance with the proposed amendment may be as high as around \$197,000 for some sites covered under the Transport Standards. However, according to stakeholder consultation, this is a ceiling estimate as, for example, where sites are compliant with the proposed requirements, and

		given the cost associated with the retrofitting requirement, existing sites that do not meet the requirements would be exempt due to unjustifiable hardship. Most non-compliant sites would be only required to upgrade the basin height and backrest, which is expected to cost less than \$5,000 per site. The major benefit from this amendment would be to ensure that new construction, for which the amendment introduces no material incremental cost, allows the additional space. Data was not provided on the number of sites that would not be compliant.
Section 15.4 Requirements for accessible toilets	Update references from AS1428.1 (2001) Figure 18, Figure 22 and Clause 10.2.1(b) to AS1428.1 (2009) Figure 38 and Clause 15.2.10, to change specifications to the location of washbasins	No material impact
Section 16.2 Compliance with AS2899.1 (1986)	Update references from AS2899.1 (1986) to ISO 7001 (2007), as AS2899.1 (1986) has been withdrawn by Standards Australia and ISO 7001 (2007) includes current international symbols	No material impact
Section 18.1 Location tactile ground surface indicators	Update references from AS1428.2 (1992) Clause 18.1 to ASNZ1428.4.1 (2009) Clause 2.3.3, 2.4, 2.5 and 2.6, to remove changes of direction and insert escalators, passenger conveyors or moving walks to align with the Premises Standards Changes of direction will be included in Directional TGSIs and other wayfinding cues	The cost associated with installation of TGSIs where requirements are not met would be approximately \$720 per escalator or moving walk. However, the benefits of standardization across multiple standards and ensuring new construction meets the requirements would be significant. No data was provided on the number of sites that would need to be upgraded.
Section 18.2 Tactile ground surface indicators	Update reference from AS1428.4 (1992) to ASNZ1428.1 (2009) Clause 2.2, 2.3.1, 2.3.2, and 3.2.1, to include specifications for discrete TGSIs, remove references to conveyances, include requirements for luminance contrast tests for TGSIs, and align with the Premises Standards	No material impact
Section 18.3 Instalment at accessible bus boarding point	Add requirements for luminance contrasting TGSIs as listed in Section 18.2	No material impact
Section 18.4 Instalment at rail stations	Update reference from AS1428.4 (1992) Clause 6.7 to ASNZ1428.4.1 (2009) Clause 3.4, to introduce requirements for luminance contrasting TGSIs, and reflect the outcome of a 2002 equivalent access process where it was recognized that platform edge TGSIs did not form part of a 1200mm width access path unless significant constraints prevented compliance	No material impact

Section 18.5 Instalment tactile ground surface indicators at wharves	Update reference from AS1428.4 (1992) Clause 6.8 to ASNZ1428.4.1 (2009) Clause 3.5, to introduce requirements for luminance contrasting TGSIs	No material impact
Section 21.1 Compliance with Australian Standard	Update reference from AS1428.1 (2001) Clause 11 to AS1428.1 (2009) Clause 13.5, to better define the location and function of door controls, add luminance contrast of door handle requirements, and to align with the Premises Standards	No material impact
Section 21.2 Passenger-operated devices for opening and closing doors	Update references from AS1428.2 (1992) Clause 23.2 and 23.3 to AS1428.1 (2009) Clause 13.5 and Clause 14, and add luminance contrast requirements, to better define controls for power operated doors and manual door opening forces, and to align with the Premises Standards	No material impact
Section 21.3 Location of passenger-operated controls for opening and locking doors	Update references from AS1428.1 (2001) Clause 11.1.2 to AS1428.1 (2009) Clause 13.5.3, to better specify the location for manual controls to power-operated doors and to align with the Premises Standards	The cost associated with replacement of power doors on legacy rolling stock which fail the requirement will be significant. However, the percentage of conveyances for which this applies, and results in a desirable public outcome, would be minimal. Additionally, the cost of retrofitting conveyances under this amendment will be high with a low-level benefit, so it is expected that the number of conveyances that are not exempt under unjustifiable hardship will be minimal.
Section 21.4 Signal devices for conveyances that stop on request	Update reference from AS1428.2 (1992) Clause 23.2 and 23.3 to AS1428.1 (2009) Clause 13.5 and 14	No material impact
Section 25.4 Circulation space in front of vending machines	Update reference from AS1428.2 (1992) Clause 6.2 to AS1428.1 (2009) Clause 6.5, to align with the Premises Standards	No material impact
Section 28.3 Location of carers, assistants and service animals	Change reference from service animal to assistance animal to align with the <i>Disability Discrimination Act 1992</i>	No material impact
Section 31.2 Information to be provided about vacating priority seating	Amend heading to include allocated spaces to better clarify the intent of the text	No material impact

5.17.4 Impact Analysis

The primary objective of these amendments is to simplify the regulatory landscape through alignment of the Premises Standards and the Transport Standards. As a significant portion of transport infrastructure is legislated through the Premises Standards, stakeholders have provided information to support the assumption that the majority of sites regulated under the Transport Standards also comply with the Premises Standards. As such, these amendments do not

necessarily represent changes to requirements for providers, operators or manufacturers, but instead act to improve consistency and ensure compliance into the future.

The 32 Australian Standards and definitional amendments are classified as minor text or definitional changes, and as such it has been determined that a cost benefit analysis is not generally relevant. Where it has been determined through initial analysis that costs are expected to be associated with the amendment, a high-level, qualitative identification of the costs and benefits has been conducted. Where quantitative evidence has been provided, this has been reported for the relevant amendment.

Of the 32 amendments, 26 are expected to result in no additional costs or benefits to operators, providers, manufacturers, or states and territories. The remaining 6 amendments are expected to result in some, but minimal impact.

5.17.5 Recommendation

Based on the consultation findings and impact analysis, the preferred option is to **support all proposed amendments to references to Australian Standards in the Transport Standards.**

5.17.6 Implementation Options

As noted in Section 5, the final implementation requirements will be considered by Transport Ministers in late 2022. This consideration will include the staging of reform implementation, and whether any change from the target date compliance approach as set out in Schedule 1 is appropriate. Different implementation approaches will have varying costs depending on the extent that changes to the Transport Standards apply to existing assets.

6. Bibliography

Accessible Transportation for Persons with Disabilities Regulations 2009 (Canada), Part 1 Personnel Training for the Assistance of Persons with Disabilities.

Australian Bureau of Statistics, Disability and Carers Australia Summary Findings <https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release>, accessed on 20 July 2021.

Australian Government Department of Education Skills and Employment Disability Standards for Education 2005, <https://www.education.gov.au/disability-standards-education-2005>, accessed on 30 September 2020.

Australian Government Department of Infrastructure, Transport, Regional Development and Communications, *The Whole Journey: A guide for thinking beyond compliance to create accessible public transport journeys*, <https://www.infrastructure.gov.au/transport/disabilities/whole-journey/index.aspx>

Australian Human Rights Commission, *Disability Standards for Accessible Public Transport Guidelines 2004 (No.3)*, <https://humanrights.gov.au/our-work/disability-rights/publications/guidelines-equivalent-access-under-disability-standards>, pg.7

Australian Hydrographic Office 2020, *Australian National Tide Tables*, <http://www.hydro.gov.au/prodserv/publications/antt.htm>.

Australian Institute of Health and Welfare (2018). *Australia's Health 2018*, Australia's health series no. 16.

Commonwealth Consolidated Acts, *Disability Discrimination Act 1992*. Section 31 - Disability Standards, http://www5.austlii.edu.au/au/legis/cth/consol_act/dda1992264/s31.html

Convention on the Rights of Persons with Disabilities, <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html>, accessed on 15 July 2021.

Crownland NSW Government, Emergency Management, Australia, <https://reservemanager.crownland.nsw.gov.au/using-crown-reserves/emergency-management>

Department for Transport (2018), *The Inclusive Transport Strategy: achieving equal access for disabled people* Department for Transport, United Kingdom, www.gov.uk/dft, accessed on 30 September 2020.

Disability Discrimination Act 1992, <https://www.legislation.gov.au/details/c2013c00022>

Disability Standards for Accessible Public Transport 2002, <https://www.legislation.gov.au/Details/F2005B01059>

Fruin J. (1987), *Pedestrian Planning and Design*, Elevator World, Northwestern University

W3C, Understanding WCAG 2.0: Understanding conformance, <https://www.w3.org/TR/UNDERSTANDING-WCAG20/conformance.html>

Appendix A – Table of Assumptions for Volume Inputs and Affected Populations

The below tables provide a summary of the volume inputs and the affected populations underpinning the regulatory burden calculations and the cost-benefit analysis.

Table 41: Volume Inputs for CBA

Value	Units	Bus	Coach	Tram/Light Rail	Train	Ferry	Taxi	Airport	Airplane
Sites	Number	112,650	0	1,830	1,073	361	2,385	136	0
Conveyances	Number	18,216	23**	649	1,473	116	21,344	0	951
Annual Trips	Number	717,008,232	1,300,000	240,409,497	809,491,159	24,542,480	*	*	*

*data not available for taxi/air travel annual trips – no impact to costs, some impact to benefits in select reform areas

**majority of survey responses included coaches as part of their bus fleet - the number of coaches is larger than 23 and incorporated into the total number of buses

Table 42: Affected Population for CBA

Reform Area	Units	Bus	Coach	Tram/Light Rail	Train	Ferry
Staff Training and Communication	Number of trips	215,102,470	390,000	72,122,849	485,694,695	14,725,488
Priority Seating	Number of trips	12,746,813	0	34,558,865	412,334,559	0
Allocated Spaces in Transit	Number of trips	5,377,562	9,750	90,153,561	264,188,479	24,542,480
Digital Information Screens	Number of trips	5,844,913	10,597	1,959,772	168,643,991	5,113,017
Lifts	Number of trips	0	0	0	0	0
Website Accessibility	Number of trips	717,008,232	1,300,000	240,409,497	809,491,159	24,542,480
Communication During Service Disruptions	Number of trips	0	0	0	0	0
Gangways	Number of trips	717,008,232	1,300,000	240,409,497	809,491,159	12,271,240
Assistance Animal Toileting Facilities	Number of trips	0	0	0	0	0
Emergency Egress	Number of trips	11,706,257	21,224	3,925,053	809,491,159	24,542,480
Fit-for-purpose Accessways	Number of trips	11,706,257	21,224	3,925,053	809,491,159	24,542,480
Wayfinding	Number of trips	358,504,116	650,000	120,204,749	161,898,232	12,271,240
Tactile Ground Surface Indicators	Number of trips	3,585,041	6,500	1,202,047	809,491,159	24,542,480
Provision of Information in Multiple Formats	Number of trips	0	0	0	0	0
Passenger Loading Areas	Number of trips	717,008,232	1,300,000	240,409,497	404,745,580	2,454,248

Appendix B – Volume Inputs for Regulatory Burden Calculations

The below tables provide a summary of the volume inputs and the affected populations used in the regulatory burden calculations.

Table 43: Volume Inputs for Regulatory Burden Calculations

Regulatory Burden Calculations Decision RIS Disability Transport Standards

Task Name	Compliance Cost for all Entities	Singular Cost	Supporting Evidence
Total compliance costs for all entities	\$169,420,000	\$155,172,000 up front \$ 14,248,000 ongoing	Total number of conveyances (42772) and total number of sites (118435)
Staff Training	\$14,248,000		
Staff Training - Buses	\$6,618,000	\$40 per hour wage rate	18,216 total buses 1.73 customer facing staff per bus 5.25 hours of training required
Staff Training - Coaches	\$6,000	\$40 per hour wage rate	23 total coaches 1.32 customer facing staff per coach 5.25 hours of training required
Staff Training - Tram/Light Rail	\$180,000	\$40 per hour wage rate	649 total trams/light rail 1.32 customer facing staff per tram/light rail 5.25 hours of training required
Staff Training - Train	\$408,000	\$40 per hour wage rate	1,473 total trains 1.32 customer facing staff per train 5.25 hours of training required
Staff Training - Ferries	\$219,000	\$40 per hour wage rate	116 total ferries 9 customer facing staff per ferry 5.25 hours of training required
Staff Training - Taxi	\$5,917,000	\$40 per hour wage rate	21,344 total taxis 1.32 customer facing staff per taxi 5.25 hours of training required
Staff Training - Airplane	\$671,000	\$40 per hour wage rate	951 total airplanes 3.36 customer facing staff per airplane 5.25 hours of training required
Staff Training - Airport	\$228,000	\$40 per hour wage rate	136 total airports 8 customer facing staff per airport 5.25 hours of training required
Priority Seating	\$18,648,000		
Priority Seating - Buses	\$1,662,000	\$2,075	18,216 total buses 2 % require update 364.32 buses requiring additional seats 2.2 additional seats required to comply 801.5 affected population

Task Name	Compliance Cost for all Entities	Singular Cost	Supporting Evidence
Priority Seating - Tram/Light Rail	\$151,000	\$520	649 total conveyances 14 % require update 90.86 conveyances requiring additional seats 3.2 additional seats required to comply 290.75 affected population
Priority Seating - Train	\$16,834,000	\$2,075	1,473 total conveyances 51 % require update 751.2 conveyances requiring additional seats 10.8 additional seats required to comply 8,112.96 affected population
Allocated Spaces	\$5,100,000		
Allocated Spaces - Buses	\$1,908,000	\$12,000	159 conveyances requiring upgrade
Allocated Spaces - Train	\$1,800,000	\$12,000	150 conveyances requiring upgrade
Allocated Spaces - Ferries	\$1,392,000	\$12,000	116 conveyances requiring upgrade
Digital Information Screens	\$21,112,000		
Digital Information Screens - Bus	\$15,731,000	\$17,136	918 digital information screens to be updated
Digital Information Screens - Tram/Light Rail	\$257,000	\$17,136	15 digital information screens to be updated
Digital Information Screens - Train	\$3,838,000	\$17,136	224 digital information screens to be updated
Digital Information Screens - Ferries	\$1,285,000	\$17,136	75 digital information screens to be updated
Website Accessibility	\$3,440,000		
Website Accessibility - Bus	\$371,000	\$20,600	18 websites to be updated
Website Accessibility - Coach	\$330,000	\$20,600	16 websites to be updated
Website Accessibility - Tram/Light Rail	\$247,000	\$20,600	12 websites to be updated
Website Accessibility - Train	\$227,000	\$20,600	11 websites to be updated
Website Accessibility - Ferries	\$288,000	\$20,600	14 websites to be updated
Website Accessibility - Taxi	\$1,648,000	\$20,600	80 websites to be updated
Website Accessibility - Airport	\$165,000	\$20,600	8 websites to be updated
Website Accessibility - Airplane	\$165,000	\$20,600	8 websites to be updated
Gangways	\$1,853,000		
Gangways - Ferries	\$1,853,000	\$35,640	52 gangways to be upgraded
Emergency Egress	\$20,957,000		
Emergency Egress - Bus	\$20,621,000	\$11,213	1,839 sites requiring emergency egress upgrades
Emergency Egress - Tram/Light Rail	\$336,000	\$11,213	30 sites requiring emergency egress upgrades
Fit-for-purpose Accessways	\$35,044,000		
Fit-for-purpose Accessways - Bus	\$34,481,000	\$18,750	1,839 sites requiring accessway upgrades
Fit-for-purpose Accessways - Tram/Light Rail	\$563,000	\$18,750	30 sites requiring accessway upgrades
Wayfinding	\$34,356,000		
Wayfinding - Bus	\$28,163,000	\$250	Number of sites 112,650 Number of signs per site required 1 Total number of signs required 112,650

Task Name	Compliance Cost for all Entities	Singular Cost	Supporting Evidence
Wayfinding - Tram/Light Rail	\$458,000	\$250	Number of sites 1,830 Number of signs per site required 1 Total number of signs required 1,830
Wayfinding - Train	\$4,292,000	\$1,000	Number of sites 1,073 Number of signs per site required 4 Total number of signs required 4,292
Wayfinding - Ferries	\$1,444,000	\$1,000	Number of sites 361 Number of signs per site required 4 Total number of signs required 1,444
TGSIs	\$3,710,000		
TGSIs - Bus	\$3,650,000	\$648	Number of sites 112,650 Percentage of non-compliant sites 0.5 % Total number of non-compliance sites 5,632.5 3m of TGSIs are required per site at a cost of \$648
TGSIs - Tram/Light Rail	\$60,000	\$648	Number of sites 1,830 Percentage of non-compliant sites 0.5 % Total number of non-compliance sites 91.5 3m of TGSIs are required per site at a cost of \$648
Passenger Loading Areas	\$10,952,000		
Passenger Loading Areas - Train	\$6,438,000	\$2,000	Number of sites 1,073 Percentage of sites with loading areas 50 % Total number of sites with loading areas 536.5 Average number of loading areas per site 2 Total number of loading areas 1,073 Number of ramps to be installed per loading area 3 Total number of ramps to be installed 3,219
Passenger Loading Areas - Ferries	\$434,000	\$2,000	Number of sites 361 Percentage of sites with loading areas 10 % Total number of sites with loading areas 36.1 Average number of loading areas per site evidence 2 Total number of loading areas 72.2 Number of ramps to be installed per loading area 3 Total number of ramps to be installed 216.6
Passenger Loading Areas - Airports	\$4,080,000	\$2,000	Number of sites 136 Percentage of sites with loading areas 100 % Total number of sites with loading areas 136 Average number of loading areas per site 5 Total number of loading areas 680 Number of ramps to be installed per loading area 3 Total number of ramps to be installed 2,040

